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IN THE MATTER OF: )

)

DETERMINATION OF RATES ) Docket No.

AND TERMS FOR MAKING AND ) 16-CRB-0003-PR

DISTRIBUTING PHONORECORDS ) (2018-2022)

(PHONORECORDS III), )

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OPEN SESSION

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7 AND TERMS FOR MAKING AND ) 16-CRB-0003-PR  
8 DISTRIBUTING PHONORECORDS) (2018-2022)  
9 (PHONORECORDS III), )  
10 -----X  
11 BEFORE: THE HONORABLE SUZANNE BARNETT  
12 THE HONORABLE JESSE M. FEDER  
13 THE HONORABLE DAVID R. STRICKLER  
14 Copyright Royalty Judges  
15  
16 Library of Congress  
17 Madison Building  
18 101 Independence Avenue, S.E.  
19 Washington, D.C.  
20  
21 March 22, 2017  
22 9:09 a.m.  
23 VOLUME IX  
24 Reported by:  
25 Karen Brynteson, RMR, CRR, FAPR

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1 P R O C E E D I N G S

2 (9:09 a.m.)

3 JUDGE BARNETT: Good morning. Please be  
4 seated.

5 MR. STEINTHAL: Your Honor, the Services,  
6 other than Apple, call David Pakman as our next  
7 witness.

8 JUDGE BARNETT: Thank you, Mr. Steintahl.  
9 Whereupon--

10 DAVID PAKMAN,  
11 having been first duly sworn, was examined and  
12 testified as follows:

13 JUDGE BARNETT: Please be seated.

14 DIRECT EXAMINATION

15 BY MR. STEINTHAL:

16 Q. Good morning, Mr. Pakman.

17 A. Good morning.

18 Q. Could you please state your full name for  
19 the record?

20 A. David Pakman.

21 Q. And where do you currently work?

22 JUDGE BARNETT: I'm sorry. Would you  
23 spell your last name --

24 THE WITNESS: Yes.

25 JUDGE BARNETT: -- because it seems to be

1 missing a letter.

2 THE WITNESS: Thank you. It's

3 P-a-k-m-a-n.

4 JUDGE BARNETT: Thank you.

5 BY MR. STEINTHAL:

6 Q. Where do you currently work, sir?

7 A. I'm a partner at Venrock.

8 Q. And what is Venrock?

9 A. Venrock is one of the oldest venture  
10 capital firms. We invest capital in small emerging  
11 technology and healthcare companies, work with them  
12 and try to grow them into large successful  
13 enterprises.

14 Q. And before getting into the details about  
15 Venrock and what you do there, can you tell us,  
16 please, about your career prior to coming to  
17 Venrock?

18 A. Sure. I have a computer science  
19 engineering degree from Penn, and after graduating  
20 from Penn, I moved to Cupertino and I worked for  
21 Apple, where I held largely two roles. First, I was  
22 a product manager working in the system software  
23 team and shipped a number of software products. And  
24 then I was the cocreator of Apple's first music  
25 group.



1 Q. And what was the music group doing at the  
2 time you were working at Apple?

3 A. We were really observing that there was a  
4 transition occurring from analog-to-digital music  
5 and working to build tools and technologies that  
6 would aid in that transition.

7 Q. When you left Apple, did Apple have, as  
8 of then, a consumer-facing music business?

9 A. No, Apple did not. This was before the  
10 iPod and iTunes and the music store.

11 Q. What did you do after Apple?

12 A. So after Apple, I joined a startup called  
13 N2K. It was one of the first digital music  
14 companies ever created. And it operated really one  
15 of the first on-line retail stores for the sale of  
16 CDs. It was called MusicBlvd. I was the head of  
17 product and business development there. And I also  
18 launched a service called e-mod, which was I think  
19 one of the very first digital download services  
20 where we sold music a la carte.

21 Q. And during what time frame were you at  
22 N2K?

23 A. This was 1997 to 1999, around that time.

24 Q. And what did you do after N2K?

25 A. In 1999, I became co-founder of my first

1 company. It was called MyPlay. And it was a  
2 digital music company also. It was the pioneer of  
3 the digital music locker. This was an on-line  
4 repository for the uploading and storage of your  
5 MP3s or digital downloads to allow you to stream  
6 them back to yourself on -- on multiple devices.

7 Q. And what did you do after your -- your  
8 time at MyPlay?

9 A. After MyPlay, I joined a small private  
10 equity group called Dimensional Associates. We had  
11 a pool of capital and we bought in their entirety  
12 several digital music companies and operated them  
13 ourselves. One of them called The Orchard, a  
14 digital distributor, and one was eMusic, which was a  
15 digital music service that I became the COO of and  
16 then the CEO for a total of five years.

17 Q. After Venrock, can you give us some  
18 examples of the companies Venrock has invested in?

19 A. Yes, sure. Venrock was the first  
20 institutional investor in Apple in 1977. Venrock  
21 invested in Intel, the creators of the  
22 microprocessor very early on. More recently we've  
23 invested in companies like Nest, the smart  
24 thermostat company, which was sold to Google. We  
25 led series A and series B rounds in Dollar Shave

1 Club.

2 Q. At Venrock, do you have any area of  
3 investment on which you focus?

4 A. I focus broadly on technology companies,  
5 early stage, and my investment activities is split  
6 pretty evenly between enterprise companies, as  
7 they're largely companies creating software and  
8 services for enterprises, and consumer companies,  
9 pretty broadly, consumer products companies,  
10 creative physical products, consumer services and --  
11 and consumer apps and --

12 Q. What kind of review and analysis does  
13 Venrock undertake with respect to potential  
14 investments?

15 A. Well, if it's a company that doesn't  
16 really fit our investment criteria, we don't do a  
17 lot of work on. But if it is one that we're  
18 interested in, we do a significant amount of work.  
19 We evaluate the team behind the-- the company, their  
20 ambitions, their backgrounds, motivations, their  
21 experiences. We evaluate the market. Is it a  
22 growing market? Is there room for competition? Is  
23 the -- is the market emerging or mature?

24 We evaluate the business models of the  
25 companies, their potential margin structure and

1 pricing. And we evaluate the product, which is the  
2 -- the thing that is that they are trying to build.

3 Q. Do you, as part of this process, consider  
4 the ability of a company under review to generate a  
5 profit in the long term?

6 A. Yes, absolutely. The business model,  
7 their margins and their ability to become  
8 profitable, is a crucial determination. You have to  
9 believe that they'll eventually become profitable.  
10 Otherwise, we'll have to continuously invest in them  
11 for them to survive.

12 Q. Do you have any experience at Venrock  
13 with potential investments in digital music  
14 services?

15 A. I have reviewed scores of potential  
16 investments in digital music. Largely because of my  
17 background and experience in the industry, I'm  
18 sought after by a number of entrepreneurs that are  
19 considering launching digital music companies. So I  
20 have reviewed many, but at my time at Venrock, we  
21 have never invested in any digital music services or  
22 companies.

23 Q. What are the factors that Venrock has  
24 considered applicable to potential investments in  
25 digital music services?

1           A.    It's a challenged market.  There is high  
2 royalty costs, and that results in low margins.  
3 These companies often have low margins and are  
4 unable to get profitable, and -- and as a result,  
5 they tend to fail at high rates.  And we're -- so  
6 this is a market that's not in favor by Venrock.

7           Q.    Have you testified before the Copyright  
8 Royalty Board and its predecessor body before?

9           A.    I have.  I testified as an expert witness  
10 in Web IV, and I was a participant in the CARP Web  
11 I.

12                   MR. STEINTHAL:  Your Honors, we offer  
13 Mr. Pakman as an expert in investment in the digital  
14 music industry.

15                   MR. CHARRON:  Good morning, Your Honors.  
16 My name is William Charron from Pryor Cashman on  
17 behalf of Copyright Owners.  We do object to  
18 Mr. Pakman.  I realize that I'll be doing a  
19 cross-examination to support that, and I don't want  
20 to take up time now.  I just wanted to note -- note  
21 our objection to Mr. Pakman and his report.

22                   JUDGE BARNETT:  Are you objecting to his  
23 being qualified as an expert?

24                   MR. CHARRON:  In connection with his --  
25 what he has offered as his opinion in his report in

1 this proceeding, yes.

2 JUDGE STRICKLER: Are you objecting to  
3 him -- well, let me ask the question first, counsel.  
4 Are you -- are you offering him as a fact witness as  
5 well or only as an expert witness?

6 MR. STEINTHAL: No, only as an expert.

7 MR. CHARRON: I just wanted to reserve.

8 JUDGE BARNETT: Well, the objection is  
9 overruled. I think he has established his  
10 background and -- and qualifications to testify as  
11 an expert in that area.

12 MR. CHARRON: Thank you.

13 JUDGE STRICKLER: Could you describe the  
14 area again you asked for him to be qualified?

15 MR. STEINTHAL: Investment in the digital  
16 music industry.

17 JUDGE STRICKLER: I guess he's an expert  
18 in the non-investment in the digital music industry.

19 MR. STEINTHAL: Well, the criteria  
20 associated with investing or not investing in the  
21 digital music industry, as the case may be. Some  
22 people have. Some people haven't.

23 JUDGE STRICKLER: That sounds more  
24 accurate.

25 BY MR. STEINTHAL:

1 Q. Mr. Pakman, please turn to Google Trial  
2 Exhibit 696 in your binder.

3 A. Okay.

4 Q. Is that your written direct testimony?

5 A. Yes, it is.

6 Q. And is that your signature on page 20?

7 A. Page 21, yes.

8 MR. STEINTHAL: We move to admit  
9 Exhibit 696, Mr. Pakman's written direct testimony.

10 MR. CHARRON: And same objection. I  
11 realize I'll be doing that through  
12 cross-examination.

13 JUDGE BARNETT: What is that? What is  
14 the basis of that objection?

15 MR. CHARRON: Well, I think the  
16 cross-examination will establish that there is,  
17 again, a lack of qualifications with respect to the  
18 opinions he has offered.

19 Two, a lack of an adequate methodology  
20 and, three, a lack of reliability.

21 JUDGE STRICKLER: And you didn't want do  
22 that as a voir dire before he was qualified?

23 MR. CHARRON: I could do a voir dire. It  
24 would be my cross-examination. It would be somewhat  
25 lengthy, I believe.

1 JUDGE BARNETT: 696 is admitted.

2 (Google Exhibit Number 696 was marked and  
3 received into evidence.)

4 JUDGE BARNETT: 696 is admitted.

5 BY MR. STEINTHAL:

6 Q. Mr. Pakman, what was your assignment in  
7 this case?

8 A. I was asked to provide an opinion on an  
9 assessment of the impact of rates and terms for the  
10 making and distributing of phonorecords on  
11 interactive digital music services and investors'  
12 willingness to invest in the sector.

13 Q. And when you talk about investors, are  
14 you talking about venture capital investors?

15 A. Yes, venture capital investors.

16 Q. Could you briefly summarize the opinions  
17 that you reached?

18 A. Yes. My research showed that companies  
19 in this space have royalty obligations and the  
20 payment of those royalties leaves very little margin  
21 left for the company. They experience low gross  
22 margins. These low gross margins result in a lack  
23 of profitability, and the lack of profitability  
24 leads to an inordinately high failure rate,  
25 particularly when compared with other industries.



1           This high failure rate has led to a  
2   disfavoring of this sector from venture capital  
3   investors.

4           JUDGE STRICKLER: Mr. Pakman, I want to  
5   follow up. Good morning, by the way. Good to see  
6   you again.

7           THE WITNESS: Thank you. Nice to see  
8   you.

9           JUDGE STRICKLER: You've been qualified  
10   as an expert in the industry at large, so you're not  
11   a fact witness here speaking merely with regard to  
12   your experience at Venrock.

13          THE WITNESS: Correct.

14          JUDGE STRICKLER: So you've testified  
15   that Venrock will not invest in digital music  
16   businesses. Is it your testimony that no other  
17   venture capital firms will invest in digital music  
18   services?

19          THE WITNESS: No. My testimony is, when  
20   compared with other industries, venture capital  
21   investors appear to invest at far lower rates into  
22   far fewer companies, but I can't speak for every  
23   venture capital firm.

24          JUDGE STRICKLER: I -- I understand you  
25   might not be able to speak for every firm on a

1 firm-by-firm basis, but since you're qualified as an  
2 expert in the industry, you're saying the industry  
3 does invest in digital music services but at lower  
4 levels?

5 THE WITNESS: Yes, fewer companies and  
6 fewer dollars than when compared to the other  
7 choices that -- in other segments that venture  
8 investors invest in.

9 JUDGE STRICKLER: When you say "fewer,"  
10 what metric are you using when you say "fewer"?

11 THE WITNESS: Number of companies and  
12 dollars.

13 JUDGE STRICKLER: Is it lower percentage  
14 of companies in the industry as well as the absolute  
15 numbers?

16 THE WITNESS: Both -- both an absolute  
17 number of companies. There are fewer absolute  
18 number of companies -- there are fewer absolute  
19 number of digital music companies that receive  
20 venture investment than in other sectors, and --  
21 well, that's -- that's my statement.

22 JUDGE STRICKLER: And the -- and the  
23 smaller amount of investment, is that -- is that  
24 also a metric that's done on a percentage basis,  
25 whether it's a percentage of -- of book value or --

1 or some other value?

2 THE WITNESS: I didn't make the  
3 determination of relative amount of dollars into  
4 this industry versus others.

5 JUDGE STRICKLER: Thank you.

6 JUDGE BARNETT: So when you say the  
7 investment rates are lower in digital music than in  
8 other sectors, do you mean other digital sectors --

9 THE WITNESS: Others --

10 JUDGE BARNETT: -- or manufacturing?

11 THE WITNESS: Yes, Your Honor, other  
12 technology sectors. Particularly speaking about  
13 technology-focused venture capitalists, so venture  
14 capitalists who invest in technology businesses.  
15 It's very broad. I looked at a number of sectors,  
16 and I compared investment in digital music to  
17 investment in other technology sectors.

18 JUDGE BARNETT: Thank you.

19 BY MR. STEINTHAL:

20 Q. Mr. Pakman, could you, actually following  
21 up on the questions from the panel, tell us what  
22 kind of analysis you did to underlie the opinion you  
23 just gave?

24 A. Yes, sure. So I -- I concluded -- I  
25 looked at a number of different sources of

1 information. I looked at publicly-available  
2 information and research reports. I used my own  
3 personal experience, professional experience, and I  
4 consulted the PitchBook database. And I looked at  
5 the number of companies that have been invested by  
6 venture capitalists in digital music, and I also  
7 looked at the mobile sector, the software as a  
8 service sector, and the eCommerce sector.

9 Q. Why did you choose those three other  
10 sectors for purposes of the comparative analysis  
11 that you did?

12 A. Venture capitalists have a choice about  
13 where we will invest. And those other sectors are  
14 all branches of the same technology industry in  
15 general into which venture capitalists make  
16 investments.

17 Q. And I believe you -- you mentioned  
18 research materials from PitchBook. What is  
19 PitchBook?

20 A. Yes. PitchBook is a database available  
21 to anyone who is a subscriber. It's frequently used  
22 by venture capitalists and financial service  
23 industry professionals. It's a database of more  
24 than 850,000 private companies and more than 70,000  
25 public companies.

1                   And it includes a rich amount of  
2 information about each of those companies, the names  
3 of the companies, the businesses they are in, the  
4 executives of the companies, who the investors were,  
5 how much money the investors put in, sometimes under  
6 what terms, and the outcome of the companies, what  
7 happened to them.

8           Q.    Did you apply any date or time period  
9 parameters for your search?

10          A.    I did not. I searched the entirety of  
11 PitchBook's database through their entire history.

12                   JUDGE FEDER: How far back is that?

13                   THE WITNESS: So the PitchBook was  
14 founded in 2007, but their company history, the data  
15 in the database goes back considerably farther than  
16 that. I don't know the earliest date of their  
17 entire database, but, for instance, when searching  
18 for digital music companies and mobile and SaaS and  
19 enterprise -- excuse me -- eCommerce, I found  
20 companies dating back to 1992, for example.

21                   JUDGE FEDER: For purposes of this  
22 analysis, how do you define mobile, SaaS, and  
23 eCommerce? And is there any overlap between those?

24                   THE WITNESS: Yeah, sure. So in -- in  
25 this analysis, I used PitchBook's search criteria.

1 I -- for mobile, eCommerce, and SaaS. I first  
2 selected VC-backed universe, which are all companies  
3 that have received some or more amount of venture  
4 capital investment.

5 And I simply used their mobile, SaaS, and  
6 eCommerce sorting criteria. I don't believe there's  
7 a lot of overlap, but -- among those, but I didn't  
8 confirm whether each of those was purely unique.  
9 The PitchBook tends to classify into a single broad  
10 category, which is why I selected those categories.

11 JUDGE FEDER: Thank you.

12 BY MR. STEINTHAL:

13 Q. What did your research reveal about the  
14 volume of VC-backed investments in digital music  
15 companies compared to the other three sectors you  
16 analyzed?

17 MR. STEINTHAL: And at this point, Your  
18 Honors, we -- we did a -- one demonstrative which is  
19 drawn from Mr. Pakman's written direct testimony  
20 that we've put on the board.

21 THE WITNESS: My research revealed that  
22 there is a -- there are vastly fewer venture capital  
23 -- venture capital-backed companies in digital music  
24 than there are in mobile, SaaS, or eCommerce. Some  
25 -- sometimes in about an order of magnitude

1 difference, 239 digital music companies that were  
2 venture-backed compared to about 11,000 mobile,  
3 almost 14,000 SaaS, and about 4800 eCommerce.

4 BY MR. STEINTHAL:

5 Q. By the way, can you walk us through the  
6 process by which you got to the 239 VC-backed  
7 digital music companies?

8 A. Yes. So, first, I selected the same  
9 venture-backed universe criteria as I did for  
10 mobile, SaaS, and eCommerce. I selected B to C.  
11 This would be companies engaging in something  
12 related to directly to consumers.

13 And I used the key word "music" to try to  
14 capture every company that had anything to do with  
15 music. This resulted in 1,136 companies, but this  
16 was a super set of digital music companies.

17 So in order to go from the 1,136 to the  
18 239, I had to go through every single company,  
19 perform research and analysis to figure out whether  
20 they were a digital music company. And so I  
21 discussed in my written testimony what the  
22 definition I used for digital music company, being a  
23 company engaged in requiring a licensing of music,  
24 providing music-related consumer utility or Internet  
25 radio services.

1 JUDGE STRICKLER: What paragraph are you  
2 reading from?

3 THE WITNESS: I'm sorry, yes, page 12, it  
4 is footnote -- footnote 15 beginning on 11 and  
5 ending on 12.

6 JUDGE STRICKLER: Thank you.

7 THE WITNESS: So that is -- so after  
8 going through all -- all 1,136 companies, I removed  
9 897 that did not meet this criteria, and that led to  
10 239 digital music companies.

11 BY MR. STEINTHAL:

12 Q. I'm going to come back to this briefly  
13 later when we talk about Mr. Timmins' criticisms of  
14 your testimony. But let me ask you this question  
15 now.

16 What does the far fewer number of  
17 VC-backed entrants in the digital music business  
18 tell you about that business relative to the other  
19 sectors that you analyzed?

20 A. Well, it means one of the following are  
21 true: It either means that there are fewer  
22 entrepreneurs creating digital music companies, or  
23 it means that there are fewer venture capitalists  
24 investing in them, or a combination of both of  
25 those.



1 I think you can conclude that this is an  
2 industry that has less venture activity than other  
3 industries and that it's largely disfavored by  
4 venture investors.

5 Q. Did you make any observations as well  
6 from the data in PitchBook regarding the failure  
7 rates of digital music companies compared to  
8 investments in the other sectors you analyzed?

9 A. Yes. PitchBook also tracks outcomes of  
10 companies. So in each of these categories, I also  
11 searched PitchBook to determine which companies had  
12 a distressed exit, which means that they filed for  
13 bankruptcy, they filed for reorganization, or they  
14 went out of business.

15 And that produced in digital music thus  
16 far, as of the date of the search, 37 companies,  
17 which had a distressed exit, which is about a  
18 15 percent failure rate. And mobile, SaaS, and  
19 eCommerce had a failure rate of about 7 to  
20 8 percent.

21 So digital music companies are failing at  
22 about twice the failure rate of these other sectors.

23 Q. And is that captured on the demonstrative  
24 as well?

25 JUDGE BARNETT: You have to answer

1 audibly.

2 THE WITNESS: I'm sorry, yes, it is.

3 BY MR. STEINTHAL:

4 Q. Mr. Pakman, are you aware that there have  
5 been witnesses from the Copyright Owners' side who  
6 have filed testimony in response to your opinions?

7 A. Yes, I am.

8 Q. And have you read the testimony of  
9 Jim Timmins responding to your testimony?

10 A. Yes, I have.

11 Q. First off, is Mr. Timmins correct that it  
12 is not possible to replicate the analysis that you  
13 performed in PitchBook?

14 A. No, he is not correct. I disclosed the  
15 search criteria used expressly in my testimony and  
16 anyone with access to PitchBook would have been able  
17 to re-create the same searches.

18 Q. Is access to PitchBook available to  
19 someone like Mr. Timmins?

20 A. It is. PitchBook access is available to  
21 anyone who becomes a subscriber, but I also  
22 understand that anyone who is an NVCA member, the  
23 National Venture Capital Association, of which I  
24 believe Mr. Timmins is, gets some free access  
25 available and could have performed a number of these

1 searches.

2 Q. Now, I'm going to quote Mr. Timmins'  
3 testimony in his written direct testimony in terms  
4 of criticisms he has leveled and try to get your  
5 responses to that. In paragraph 57 --

6 JUDGE FEDER: Excuse me, Mr. Steinthal.  
7 Is it written direct or written rebuttal?

8 MR. STEINTHAL: I'm sorry. Written  
9 rebuttal. Mr. Timmins only submitted rebuttal  
10 testimony.

11 BY MR. STEINTHAL:

12 Q. In paragraph 57 of his testimony, he  
13 states that you "failed to identify the total number  
14 of companies in the PitchBook Platform you searched  
15 or the time period for the searches" you conducted.

16 How do you respond to that?

17 A. I searched the entirety of the PitchBook  
18 database, and I did not date-limit the search in any  
19 way.

20 Q. And could Mr. Timmins have done the same  
21 thing?

22 A. He could have.

23 Q. By the way, were you able to export a  
24 file reflecting your entire PitchBook search and  
25 results?

1           A.    I was not.  Largely for two reasons.  
2   One, PitchBook has very limited export ability.  
3   They don't want you to take their database and --  
4   and be able to export it.  So you can only export  
5   around 100 records per day.  These searches resulted  
6   in tens of thousands of search results.

7                   And, in addition, PitchBook has terms of  
8   service that prevent you from exporting some every  
9   day to try to go around that limitation for -- and  
10  to distribute any of these exported results, so I  
11  was not able to export them.

12           Q.    Okay.  Now, also in paragraph 57 of his  
13  rebuttal testimony, Mr. Timmins says that you used  
14  different codes for different sectors in your  
15  analysis.  And he says specifically, and I quote,  
16  "you used the 'VC-backed' code when searching for  
17  venture-backed companies and comparable sectors but  
18  not when trying to identify venture-backed companies  
19  in the digital music sector."

20                   Is he correct?

21           A.    He's not.  I used the same VC universe,  
22  VC-backed universe search criteria for all of the  
23  searches.

24           Q.    Also in paragraph 57 of his rebuttal  
25  testimony, Mr. Timmins criticizes you, claiming that

1 you "failed to run more than an initial query" in  
2 the PitchBook platform to corroborate or supplement  
3 the results of your 'initial query.'"

4 Did you run just one query?

5 A. I did not. I ran scores of queries to  
6 figure out which search criteria would produce, one,  
7 the most accurate but, two, the most comprehensive  
8 results suitable for the research, and I disclosed  
9 the methods I chose that yielded such results.

10 Q. Continuing with Mr. Timmins' criticisms,  
11 in paragraph 58 of his rebuttal testimony, he says  
12 that you had no basis for "excluding 897 companies  
13 which were not companies in a business requiring the  
14 licensing of music or providing music-related  
15 consumer utilities."

16 This is the subject you mentioned earlier  
17 a little bit. Can you tell us in a little bit more  
18 detail what you did for purposes of excluding those  
19 897 companies to get down to the smaller 230 some  
20 odd digital music company investments?

21 A. Sure. I had to review every one of the  
22 1136. I utilized my own familiarity with the  
23 companies. I utilized the companies' information  
24 themselves, what they say they do. I utilized  
25 PitchBook's information about what those companies

1 do. And I researched publicly-available information  
2 to determine whether they fit this criteria.

3 Q. Now, in paragraph 59 of his testimony,  
4 his rebuttal testimony, Mr. Timmins criticizes you  
5 for not including Google and Amazon investments in  
6 the digital music industry in your results.

7 Why did you not include them?

8 A. This is a search of venture-backed  
9 digital music companies. While Amazon and Google  
10 were venture-backed companies some 15 or 22 years  
11 ago when they were created, something like that,  
12 they were not engaged in digital music activities at  
13 that time, and so they would not have fit the  
14 criteria of a venture-backed digital music company.  
15 They came to engage in digital music many years  
16 later, in both cases after their venture investors  
17 had exited.

18 Q. In paragraph 59 as well of his rebuttal  
19 report, Mr. Timmins claims that your "search and  
20 exclusion criteria were not tailored to limit your  
21 results to digital music streaming services and, in  
22 fact, may not even be tailored to capture only  
23 digital music services. Brick-and-mortar music  
24 retailers and other non-digital music services would  
25 appear to fit within Mr. Pakman 's search and

1 exclusion criteria."

2 Is that accusation by Mr. Timmins well  
3 founded?

4 A. It is not. In reviewing all 1,136  
5 companies to determine which were digital music  
6 companies, I excluded brick-and-mortar, but it does  
7 capture companies broader than just interactive  
8 digital streaming companies. It includes, for  
9 instance, digital download companies. I understand  
10 that they also require a mechanical license, and so  
11 they're relevant to this discussion.

12 Q. Next, are you aware that Mr. Timmins, in  
13 paragraph 63, claims that you "employed a double  
14 standard" for what you consider a successful exit  
15 for a company from a digital music service as  
16 compared to exits from the other sectors you  
17 examined?

18 A. Yes.

19 Q. What was the definition you used for  
20 successful exits in the mobile, eCommerce, and SaaS  
21 markets you examined as discussed for reference  
22 purposes on the panel in paragraph 27-B on page 13  
23 of your testimony?

24 A. So I also used PitchBook to determine the  
25 outcomes of companies. And I searched for -- for

1 mobile and for eCommerce and for SaaS. I looked to  
2 determine how many of those companies had profitable  
3 exits for their investors.

4           This would mean the investors received  
5 their capital back, their original investment  
6 capital, plus one or more dollars. And that's the  
7 results for successful investments. And I think  
8 you'll see in -- in my research that that resulted  
9 in success rates of around 20 to 35 percent.

10           Q.    Okay. And --

11           JUDGE STRICKLER: Why would you define  
12 success as just one dollar more than investment  
13 because if that's lower than the market rate of  
14 return, the opportunity cost is such that they  
15 really lost money from an economic point of view?  
16 Wouldn't that be so?

17           THE WITNESS: Yes. First, I wanted to  
18 just determine which ones received some modicum of  
19 success, that one could argue that their investors  
20 made one dollar or more. I agree with you that that  
21 standard would not be sufficient for most venture  
22 capitalists and most investors, but to get a basis  
23 for an apples-to-apples comparison, that's what I  
24 started with.

25           JUDGE STRICKLER: That's what you started



1 with. Did you then become more refined to see  
2 whether the rate of return from these companies that  
3 you either put in the failure or success box met the  
4 market rate of return as you -- as you calculated or  
5 estimated it?

6 THE WITNESS: I do think that's a good  
7 question. I did not perform that analysis for  
8 mobile, for enterprise -- for SaaS, and for  
9 eCommerce. However, in my testimony, I do propose a  
10 hurdle rate, not a rate, but I proposed a hurdle of  
11 25 million dollars in total return to the -- to the  
12 investors, and I determined that only 7 of the  
13 digital music companies met that rate.

14 Now, you may be curious why did I choose  
15 the 25 million dollars?

16 JUDGE STRICKLER: I'm not --

17 THE WITNESS: Okay.

18 JUDGE STRICKLER: -- but I'm also  
19 curious, did you use -- was the 25 million dollar  
20 hurdle only in the digital music area?

21 THE WITNESS: I did. I just used the  
22 basis of comparison for just a basic determination  
23 of whether investors can at least get their money  
24 out and make a little bit of money across all four  
25 sectors.

1 JUDGE STRICKLER: But the 25 million was  
2 just on the digital music service?

3 THE WITNESS: Correct.

4 JUDGE STRICKLER: Okay. So now my other  
5 curiosity, as you correctly identified it, why 25  
6 million in the digital music service?

7 THE WITNESS: Yes. Yes, sure. So when  
8 venture capitalists make investments, the period,  
9 the holding period is quite long. In most cases --  
10 well, the average holding period for early-stage  
11 venture investors is eight years, sometimes as long  
12 as ten years, and the risks are high.

13 So commensurate with the size of the fund  
14 and the number of investments a venture capitalist  
15 makes, we need to achieve some certain amount of  
16 total dollars back, 25 million dollars would be  
17 considered by most funds our size, early-stage  
18 venture funds, a meaningful venture return. It  
19 would be a minimum, but it would be a meaningful  
20 one.

21 JUDGE STRICKLER: 25 million would  
22 represent a percentage of -- of return of what on  
23 the -- on the venture capital investment?

24 THE WITNESS: Well, it would depend on  
25 how much money they put in, right?

1 JUDGE STRICKLER: That's my point, yeah.

2 THE WITNESS: But early-stage venture  
3 capitalists -- I'm speaking very generally here --  
4 usually invest somewhere between 2 to 8 billion  
5 dollars. And so -- and it depends on how much total  
6 money the -- the company raised, but it could  
7 represent a 5 -- a 3X or a 5X.

8 JUDGE STRICKLER: And you had no hurdle  
9 where you say for the -- for the other comparators?

10 THE WITNESS: I did not do that analysis.

11 JUDGE STRICKLER: And the effect -- do  
12 you think that the absence of having any kind of a  
13 hurdle rate skews the -- not skews the analysis --  
14 but makes the analysis in some sense less than  
15 accurate?

16 THE WITNESS: Well, it doesn't make it  
17 less than accurate, but I think I was being  
18 conservative here in the terms of the definition of  
19 what -- on what an investor would look for and what  
20 an investor -- what would be considered successful.

21 When looking at just this definition of  
22 profitable investment, one or more dollars, it --  
23 the -- the analysis showed that the success rate in  
24 these other sectors, mobile, eCommerce, and SaaS,  
25 are 2 to 3X that, the success rate in digital music.

1 JUDGE STRICKLER: And when you -- counsel  
2 may be getting into it, so I may be jumping ahead,  
3 in which case, but --

4 MR. STEINTHAL: By all means.

5 JUDGE STRICKLER: You -- how do you  
6 define success in terms of what happened? Was it --  
7 was it an operating income that was sufficient or a  
8 return to the shareholders that was -- or venture  
9 capitalists that was sufficient? And I know -- and  
10 this is where I may be getting ahead of your  
11 testimony and counsel's questions, whether or not a  
12 firm exited by way of merger or some other  
13 consolidation? Are you going to be -- I assume  
14 you're going to be speaking to that soon, so maybe  
15 I'll let counsel do it in his more organized  
16 fashion.

17 BY MR. STEINTHAL:

18 Q. Well, I mean, just to follow up on the  
19 Judge's question, your definition, in paragraph 27-B  
20 on page 13, of a profitable exit that you testified  
21 to, that the investors got at least their money back  
22 and one dollar --

23 A. Or more.

24 Q. -- when they exited, was that data that  
25 was collected and available within PitchBook?

1           A.    Yes, PitchBook has search criteria for  
2 profitable investment.

3           Q.    And is that why you used that as the  
4 criteria for assessing whether there was a  
5 "successful exit"?

6           A.    I did.

7                   JUDGE STRICKLER:   So when you say they  
8 were successful by getting back their -- their  
9 investment plus a dollar, was that --

10                   THE WITNESS:   Or more.

11                   JUDGE STRICKLER:   Or more.   Was that both  
12 in terms of asset value that they cashed out and  
13 were able to sell their equity interest for whatever  
14 they put in plus a dollar or more, and did it also  
15 include income stream that on some sort of a cash  
16 flow basis you equated to getting -- to getting a  
17 return plus at least a dollar more?   Was it both of  
18 those or just one of those?

19                   THE WITNESS:   So I -- I believe that  
20 PitchBook's definition of profitable exit includes  
21 some measure of cash-on-cash return.   So probably --  
22 I don't know for certain, I'd have to go back and  
23 read the definition, but I'm -- I'm fairly certain  
24 that they're talking about either cash or cash  
25 equivalent.   So either cash, like a cash buyout, or

1 stock that had the value at the time of the amount  
2 of invested capital plus some.

3 But not the income stream that you talk  
4 about, which would be a very uncommon exit for  
5 venture investors.

6 JUDGE STRICKLER: I realized after I  
7 asked the question, that exit and -- and income  
8 stream could be mutually exclusive, so it might have  
9 been a bad question.

10 So I just want to understand your  
11 categories. You have a success category, a failure  
12 -- a success bucket and a failure bucket.

13 THE WITNESS: Yes.

14 JUDGE STRICKLER: Have some of the  
15 venture capitalists' investments that you have in  
16 your report, are they still invested and they  
17 haven't left, so -- well, let me ask, do you have  
18 that situation too?

19 THE WITNESS: Yes. So the -- of the 239,  
20 I identified only 37 that have had a distressed exit  
21 and 63 that had some form of exit. And the rest are  
22 ongoing, still going on.

23 JUDGE STRICKLER: So do you find those  
24 that are still ongoing as successes, failures or --

25 THE WITNESS: I made no determination as

1 to whether they are yet successful or a failure. We  
2 just -- we don't know yet.

3 JUDGE STRICKLER: Thank you.

4 BY MR. STEINTHAL:

5 Q. Now, Mr. Timmins criticized you for using  
6 the 63 exit a year in paragraph 27-A of your  
7 testimony as to the digital music services, and  
8 that's where he claimed you did a double standard.

9 Can you explain why you used the 63 exits  
10 in paragraph 27-A?

11 A. Yes. I was even more conservative in the  
12 definition of exit for digital music. I included  
13 any exit where the investors received even some of  
14 their money back.

15 So it could have been an economic loss  
16 for them, but that still met the definition of exit.  
17 And that's how I got to the 63. And that --

18 Q. So if -- if you used the same definition  
19 for a successful exit in the digital music sector as  
20 you testified a few moments ago you used for the  
21 other three sectors you examined in paragraph 27-B,  
22 what would the result be?

23 A. So I did go back and run that search.  
24 And the answer is 26.

25 MR. CHARRON: I just object. This is

1 beyond his report. I mean, there has been a lot of  
2 supplementing that's trying to be put in here, but  
3 this is apparently a new analysis he says he has  
4 done.

5 MR. STEINTHAL: This is a direct response  
6 to Mr. Timmins' criticism. So I think I'm entitled  
7 to -- to go into that.

8 JUDGE BARNETT: You may. Overruled.

9 MR. CHARRON: I don't think that's fair,  
10 but...

11 THE WITNESS: So I did re-run that. And  
12 the answer is 26. So of the 239, 26 produced a --  
13 26 companies produced a profitable exit of one  
14 dollar or more in profit to their investors, which  
15 is about a 10 percent success rate compared to the  
16 20 to 35 percent in the other three sectors.

17 BY MR. STEINTHAL:

18 Q. And just to put a pin in it, responding  
19 to Mr. Timmins' criticism, are the 26 company figure  
20 you just gave an apples-to-apples comparison to the  
21 successful exit criteria that you applied in  
22 paragraph 27-B to the other three sectors?

23 A. Yes.

24 Q. And responding to Judge Strickler's  
25 question from a moment ago, just to be clear, what's



1 the difference between the 26 companies you just  
2 mentioned that had a successful exit of at least  
3 getting their money back and one dollar in return --

4 A. Or more.

5 Q. -- and the seven companies you identified  
6 in paragraph 27-A that had achieved a "meaningful  
7 venture return"?

8 A. Yes. So as I mentioned earlier, that  
9 there is a hurdle to consider a real successful exit  
10 or otherwise the venture capital model doesn't  
11 really work. We're not able to get a large enough  
12 return for our investors. And so I used 25 million  
13 as a proxy relative to the fund size that many  
14 venture investors are when they invest in  
15 early-stage companies as the minimum for a  
16 meaningful venture return.

17 Q. Now, are you aware that Mr. Timmins  
18 disputes your testimony about the lack of investment  
19 in the interactive music space by reference to the  
20 fact that -- and now I'm quoting from paragraph 22  
21 -- "many on-demand streaming services have launched  
22 in the U.S. in the past few years." And then he  
23 goes on to cite Slacker, Google, Apple, Amazon,  
24 SoundCloud, iHeart, and Pandora? Are you aware of  
25 that?

1 A. Yes, I'm aware of that.

2 Q. How do you respond to his testimony about  
3 those companies having launched interactive music  
4 services?

5 A. These are not new entrants into the  
6 digital music business. These are preexisting  
7 digital music companies or companies engaged in some  
8 digital music activity that have added some  
9 interactive features. They've expanded their  
10 product offering, but they're not new digital music  
11 companies.

12 Q. They're not new entrants?

13 A. They're not new entrants.

14 JUDGE STRICKLER: But it's new capital  
15 that has been put into -- into the business. Even  
16 if they're existing businesses with existing  
17 services, they've enlarged the capital investment in  
18 those services; isn't that true?

19 THE WITNESS: Yes, it's not new venture  
20 capital, and it's not new institutional capital, but  
21 it is presumably an investment from the balance  
22 sheets of the existing large companies.

23 JUDGE STRICKLER: Why, in our setting of  
24 rates, would we want to distinguish between venture  
25 capital, institutional capital, and internal capital

1 of existing companies or companies that are going to  
2 diversify into this in this market, this interactive  
3 market?

4 THE WITNESS: Sure. I would think, Your  
5 Honor, that one relevant consideration would be is  
6 there access to capital for new entrants? Are there  
7 -- is the market healthy such that new companies can  
8 be created to try to grow into new businesses, to  
9 grow the pie and provide larger revenue and larger  
10 royalties.

11 JUDGE STRICKLER: Well, doesn't that --  
12 that begs the question of why -- you may be right,  
13 but it begs the question of why we would need new  
14 entrants to be able to grow the pie and make the  
15 business healthy. Why can't we also -- why couldn't  
16 it also be the case that old entrants or bigger  
17 companies that are trying to horizontally diversify  
18 like an Apple or an Amazon or a Google by putting  
19 their own internal capital in, or because they're so  
20 big having access to institutional capital, why  
21 can't that grow the pie -- the pie as well?

22 THE WITNESS: Well, my -- my view would  
23 be that you'd want a mixture of both to have a  
24 healthy market because then you really are offering  
25 consumers the most amount of choice. You have a

1 healthier market with lots of competition, both  
2 small and large.

3 JUDGE STRICKLER: Well, that begs two --  
4 at least two more questions.

5 THE WITNESS: Okay.

6 JUDGE STRICKLER: Because what does it  
7 mean to have a -- let's take one them at a time.  
8 What does it -- what do you mean when you say "a  
9 healthy market"?

10 THE WITNESS: Well, I would -- I would  
11 think that, first, consumer choice would be  
12 paramount in the definition of whether a market  
13 could be healthy. Are there a number of different  
14 choices; therefore, a healthy competition to advance  
15 the state of the art, to provide maybe some price  
16 competition, to provide value competition? That  
17 probably would be an example of a healthy market.

18 JUDGE STRICKLER: That was my -- the  
19 first question that was begged --

20 THE WITNESS: Okay.

21 JUDGE STRICKLER: -- which leads directly  
22 into the -- to the next question. As a venture  
23 capitalist, why do you want the companies that you  
24 invest in to have competition?

25 THE WITNESS: Well, we're -- I think

1 we're looking for -- I would answer the question a  
2 little bit differently. We're looking to see  
3 whether it's possible or maybe even likely that new  
4 entrants can survive. If there is -- if it's an  
5 unhealthy market, there are only large companies  
6 participating and the failure rates of the small  
7 companies are very high, we would not consider that  
8 healthy. In fact, I think many venture investors  
9 have made that determination and tend to shy away  
10 from digital music.

11 JUDGE STRICKLER: Thank you.

12 BY MR. STEINTHAL:

13 Q. Let me just pick right up where  
14 Judge Strickler was and point you to paragraph 29 of  
15 your written testimony.

16 A. Yes.

17 Q. You make the statement in paragraph 29  
18 that, and I quote, "large companies like Apple,  
19 Google, and Amazon may be willing to operate low  
20 gross margin digital music services because their  
21 other companion businesses are profitable and can  
22 subsidize the music service."

23 Can you elaborate on what you mean by  
24 "subsidize"?

25 A. As I just discussed with Judge Strickler,

1 very few independent digital music services remain.  
2 And the large companies are the ones that are  
3 investing at this point. There are very little  
4 investment capital coming from institutions.

5           When the large companies are making  
6 investments in digital music, they are utilizing the  
7 profits from elsewhere in their business, from other  
8 businesses, other business lines they have, as the  
9 basis for the cash that they're investing in their  
10 digital music services. And I believe they're also  
11 using their large user bases to bring more users  
12 over and grow these services. And that's the  
13 definition of "subsidize."

14           JUDGE STRICKLER: But couldn't -- you  
15 call that a subsidy, but couldn't one also say  
16 that's their investment in the music service? I  
17 mean, when you invest, when -- when a venture  
18 capitalist invests, they -- they take funds and they  
19 become -- those funds become illiquid because now  
20 they're invested in the startup of the entry  
21 business and, as you say, there's a long time  
22 horizon before they may become profitable. So  
23 they've taken -- they've exchanged liquidity for a  
24 potential payoff. If Apple, Google, and Amazon and  
25 companies of that size decide to take money from

1 other parts of their business, we can be pejorative,  
2 perhaps, and call that a subsidy, or we could be  
3 perhaps economically neutral and call it an  
4 investment.

5               Why would you -- why would you label it a  
6 subsidy rather than an investment?

7               THE WITNESS: Well, I -- I don't consider  
8 subsidy to be a negative -- negative concept, first.

9               JUDGE STRICKLER: Okay.

10              THE WITNESS: But I -- I agree that the  
11 -- that in this case, they're providing some  
12 investment, but they're providing something else  
13 also, right? They are -- they're also providing  
14 perhaps their large user bases or other assets as a  
15 way to drive some success beyond just capital, which  
16 a venture capitalist just brings capital. I also  
17 think they have longer time horizons and more  
18 patience, perhaps, than venture capitalists and are  
19 willing to undertake this investment for a long  
20 period of time.

21              JUDGE STRICKLER: Doesn't that suggest  
22 they have a superior business model to potential  
23 entrants that allows them to do that? And if that's  
24 the case, perhaps that's the business model that  
25 succeeds in this business and the smaller business

1 models can't -- can't turn a profit and have -- and  
2 can't wait out that longer time horizon? So if  
3 that's the case, why should we try to equalize the  
4 -- the opportunities of disparate business models?

5 THE WITNESS: Well, we don't know yet  
6 whether they will be able to wait it out, as you  
7 say, or use these other assets to grow them to a  
8 scale where they are profitable. I think we're  
9 surmising that that's a strategy, but we don't know  
10 yet because we don't -- we haven't seen any evidence  
11 that these services reach profitability.

12 So I think it's an open question.

13 JUDGE STRICKLER: Thank you.

14 BY MR. STEINTHAL:

15 Q. Let me just follow up on one aspect of  
16 what you were just saying in response to  
17 Judge Strickler.

18 Have you seen any evidence of a large  
19 company's ability to exploit its preexisting user  
20 base to scale its music service?

21 A. Yes, I think Apple is a good example of  
22 this. They bought Beats for 3 billion dollars,  
23 largely a headphone company but had a small and, I  
24 believe, failing digital music service called Beats  
25 Music.



1 MR. CHARRON: I'd just object again,  
2 we're outside his report.

3 MR. STEINTHAL: I think this is simply an  
4 elaboration of what is in Mr. Pakman's paragraph 29,  
5 talking about the investments made by large  
6 companies like Amazon, Google, and -- and Apple.

7 JUDGE STRICKLER: Maybe I'm incorrect but  
8 didn't he mention Beats in his report as well? Did  
9 you mention Beats in your report, Apple's  
10 acquisition? I could be confusing it with other --

11 MR. STEINTHAL: Well, I was going to get  
12 there because one of the criticisms Mr. Timmins  
13 makes is his failure to identify certain  
14 investments. I was going to go there in a moment,  
15 and I'm happy to do that right now. And then I can  
16 come back to the question.

17 JUDGE BARNETT: In the meantime, the  
18 objection is sustained.

19 MR. STEINTHAL: Okay.

20 BY MR. STEINTHAL:

21 Q. We'll come back to that. Let me ask you  
22 this. Are you aware that Mr. Timmins claims in --  
23 in his testimony that your conclusions about the  
24 lack of a healthy investment environment in digital  
25 music are belied by certain investments, reported

1 investments or impending investments, to use his  
2 words, associated with four companies, including  
3 Spotify, SoundCloud, Apple and Beats, and Vevo?

4 A. Yes.

5 Q. Let me ask you to respond to Mr. Timmins'  
6 testimony on each of those four subjects to see  
7 whether you have any response to his conclusion  
8 about the investments or reported investments with  
9 those companies. What about Spotify?

10 A. So Spotify, I'm aware that last year,  
11 based on reading public reports, the company raised  
12 a billion dollars of debt financing. And the terms  
13 of this financing, according to public reports, were  
14 severe. They have a coupon rate on the -- on the  
15 debt that increases over time if the company does  
16 not go public, and they also have a discount in the  
17 conversion of debt to equity that increases over  
18 time if the company goes public.

19 Effectively, the company, by its  
20 investors, will decline in value the longer it does  
21 not go public. These terms are severe terms and, I  
22 think, are indicative of a -- of an unhealthy market  
23 or at least an unwillingness of many investors to  
24 invest.

25 MR. CHARRON: Again, we're beyond the

1 report. We're beyond elaborating. And I object. I  
2 move to strike.

3 JUDGE STRICKLER: I think -- I think  
4 counsel candidly said it was not in the report, and  
5 so the question, I suppose, is whether or not it's  
6 sufficient -- it's appropriate for him to try to  
7 respond to the rebuttal criticism.

8 MR. STEINTHAL: Which is exactly why I  
9 asked the question.

10 MR. CHARRON: Well, I would just submit  
11 that it's one thing to respond to a rebuttal  
12 criticism. It's another to offer here with no  
13 support for the first time a whole new analysis that  
14 he says he has done that I'm not going to have an  
15 opportunity to meaningfully cross. So that's my  
16 objection.

17 MR. STEINTHAL: I think it was a subject  
18 in Mr. Timmins' deposition, report and deposition.  
19 So they've had adequate time to prepare for any  
20 examination on this topic.

21 JUDGE BARNETT: He's allowed to respond  
22 to criticisms, and the objection is overruled.

23 THE WITNESS: If I could finish on  
24 Spotify.

25 BY MR. STEINTHAL:

1 Q. Yes.

2 A. So he was saying that Spotify's -- first  
3 of all, this 1 billion dollar financing is  
4 indicative of interest in digital music and that  
5 also Spotify has an impending IPO.

6 An event in the future is not an  
7 indication of financing activity now. Spotify's  
8 IPO, according to press reports, has been impending  
9 for a very long time. There were reports that they  
10 were -- they postponed their IPO last year, and I  
11 read just this month that they have once again or  
12 may have once again postponed their IPO.

13 So you can't count some future potential  
14 financing event as evidence of activity of financing  
15 now.

16 BY MR. STEINTHAL:

17 Q. And what about his reliance on investment  
18 in SoundCloud?

19 A. SoundCloud had an investment by Twitter  
20 last year. And I have read reports that now this  
21 year, after SoundCloud launched a digital music  
22 service, that they're having severe trouble raising  
23 any additional capital, that to the extent they'll  
24 be able to raise it, it will be at a valuation much  
25 lower than last year's Twitter valuation.

1 MR. CHARRON: Object, Your Honor.

2 THE WITNESS: And I've read reports that  
3 they may soon have to file for bankruptcy.

4 JUDGE BARNETT: I'm sorry. This is rank  
5 hearsay. So could you give us some reason why we  
6 should accept this testimony?

7 MR. STEINTHAL: He's testifying about  
8 reports that he has read. And I will provide those  
9 reports during the examination of Mr. Timmins.

10 MR. CHARRON: I think it's clear that  
11 everybody recognizes this is hearsay. And saying  
12 that he's going to offer the sources down the road  
13 with another witness doesn't really cure anything.

14 JUDGE BARNETT: True enough. Also our  
15 rules say we can accept hearsay if we deem it  
16 appropriate. But in this circumstance,  
17 Mr. Steintal, it's inappropriate for you to say he  
18 can sit here and testify about all these things he  
19 has read without identifying them and that you will  
20 later produce these things.

21 MR. STEINTHAL: Your Honor, the -- he's  
22 an expert. He has relied on reports in the press  
23 about certain transactions. We would not have gone  
24 into this testimony had not Mr. Timmins in his  
25 report assailed this witness' --

1 JUDGE BARNETT: Sorry. You said in the  
2 press. I didn't hear him identify that as public  
3 reporting.

4 MR. STEINTHAL: Okay.

5 JUDGE BARNETT: So there's a difference.

6 MR. STEINTHAL: Okay. Let me -- let me  
7 elicit that.

8 THE WITNESS: Subtle but a difference.

9 And, Mr. Charron, Mr. Timmins is coming,  
10 okay? He can respond to what Mr. Pakman is saying  
11 today when he comes for his testimony as well.

12 MR. CHARRON: That's true enough. But  
13 Mr. Pakman can't respond to any questions I may have  
14 on cross because I don't even have the articles that  
15 he's claiming he looked at. We don't know what they  
16 are, we don't know what they say.

17 And Mr. Pakman is, you know, a pumpkin  
18 after this testimony. So --

19 MR. STEINTHAL: They -- they are a gifted  
20 law firm. They can look up Spotify on the web.  
21 They can look up SoundCloud on the web.

22 JUDGE BARNETT: Well, not between -- not  
23 between now and lunchtime.

24 MR. STEINTHAL: Well, they could have  
25 done it after Mr. Timmins' deposition when I

1 inquired precisely of the basis for his testimony  
2 that these investment events were events that led --  
3 lent support to his criticism. They had every  
4 opportunity since his deposition, knowing exactly  
5 our dubious view of Mr. Timmins' testimony about the  
6 so-called investor events.

7 JUDGE STRICKLER: So just so I  
8 understand, at Mr. Timmins' deposition, you  
9 confronted him with the same facts to which Mr. --  
10 Mr. Pakman is now testifying about the nature of the  
11 SoundCloud investments, Spotify investments, et  
12 cetera?

13 MR. STEINTHAL: I asked him questions  
14 about it, and he professed to rely on whatever it  
15 was that was in his report and that he was unaware  
16 of any other press reports about the additional  
17 rounds of investment in Spotify, about the delayed  
18 IPO, about the terrible financial condition of  
19 SoundCloud.

20 JUDGE STRICKLER: Well, he -- Mr. Timmins  
21 is an expert or fact witness?

22 MR. STEINTHAL: He's an expert.

23 MR. CHARRON: He's a rebuttal expert.

24 JUDGE STRICKLER: Rebuttal expert. Did  
25 you contemplate utilizing his deposition testimony

1 and the impeachment you say you have of him as  
2 direct evidence in your direct case? Suppose you  
3 were eliciting it from a witness who is -- who is  
4 now speaking about hearsay?

5 MR. STEINTHAL: No. Well, I mean, press  
6 reports are press reports.

7 JUDGE STRICKLER: Well, we don't have the  
8 press reports. He's saying they're press reports.  
9 I have no reason to disbelieve him, but I don't have  
10 any -- we don't have any foundation for it. What  
11 I'm saying is if you have deposition testimony  
12 that's in some sense an admission or a declaration  
13 against interest or some sort of impeachment, why --

14 MR. STEINTHAL: It will be impeachment.  
15 When he sits up on that stand later this week or  
16 next week, we will see the lack of foundation for  
17 the conclusions that Mr. Timmins reached and his  
18 extremely selective view of reading press articles.

19 JUDGE STRICKLER: Well, I understand  
20 that. That's -- that's all well and good. That's  
21 fine, but why isn't it also just -- isn't it a  
22 better way to get it into your case as deposition  
23 testimony that's in some sense an admission or a  
24 declaration against interest as opposed to trying to  
25 get a witness to speak about hearsay?



1                   MR. STEINTHAL: I think, Judge, it's --  
2 it's both. We felt that twice is better than once  
3 on this topic, once through a witness that has been  
4 criticized for failing to consider investments in  
5 SoundCloud, failing to consider investments in a  
6 company like Vevo, which has nothing to do with the  
7 digital interactive music service industry, and the  
8 acquisition of Beats by Apple. He was criticized  
9 for not having considered those events.

10                   JUDGE BARNETT: Well, he can respond to  
11 that criticism without citing numerous unnamed press  
12 reports that are clearly hearsay, and I don't think  
13 that this is the appropriate way to get them in.  
14 Sustained.

15                   MR. STEINTHAL: Okay.

16 BY MR. STEINTHAL:

17                   Q. Mr. Timmins relied on reported  
18 investments in Vevo in support of his conclusion  
19 that you were not considering appropriate events in  
20 your assessment. How do you respond to that?

21                   A. Vevo is an over-the-top video network,  
22 OTT, more akin to a cable company. It doesn't -- it  
23 operates under a vastly different rights regime than  
24 the one that interactive music services operate  
25 under. And so its financing activities are not an

1 indication of -- of investment in the interactive  
2 digital music sector.

3 Q. And he criticized you for not considering  
4 -- as part of the healthy investment marketplace in  
5 digital music services, for not considering Apple's  
6 investment in Beats. How do you respond to that?

7 A. Apple did buy Beats for 3 billion  
8 dollars. It was and remains today largely a premium  
9 headphone company and speaker company, largely a  
10 hardware company. In fact, Apple still sells Beats  
11 products under the Beats brand. It's a very  
12 successful hardware company.

13 And at the time of its purchase, it had a  
14 largely failing digital music service with fewer  
15 than 250,000 subscribers. So taking that 3 billion  
16 dollar purchase as evidence of investment in  
17 interactive digital music services is erroneous.

18 Q. Now, going back to the question I had  
19 asked you earlier -- and this will, I think, be my  
20 last question -- have you seen any evidence -- going  
21 back to your testimony in paragraph 29 and -- and  
22 what you've said today, have you seen any evidence  
23 of a large company's ability to exploit its  
24 preexisting user base to scale its music service?

25 A. I think the Apple example is a great one.

1 Since that purchase of Beats, they reengineered the  
2 Beats service, rebranded it, added features,  
3 relaunched it, and have marketed heavily to their  
4 existing user base and grown it to, I understand,  
5 more than 20 million paying subscribers.

6 MR. STEINTHAL: I have nothing further,  
7 Your Honors.

8 JUDGE STRICKLER: I have a question for  
9 you before cross begins. On paragraph 13-A of your  
10 direct testimony, it's on page 4. Let me know when  
11 you have it.

12 THE WITNESS: Yes, I'm there.

13 JUDGE STRICKLER: You say, "The digital  
14 music service industry has fared poorly due  
15 primarily to music licensing royalty rates." Let's  
16 leave aside the music licensing royalty rates for  
17 the moment. You say "primarily."

18 Tell me the other reasons why in your  
19 opinion the digital music service industry has fared  
20 poorly?

21 THE WITNESS: This is the common trait of  
22 all digital music companies that I reviewed, that  
23 the high royalties lead to low margins. So --

24 JUDGE STRICKLER: Okay. That -- that's  
25 what I was trying to exclude because you used the

1 word "primarily." I understand your testimony that  
2 that's -- "primarily" means that's the main reason,  
3 which, to my mind, means there are other less  
4 important reasons, in your opinion.

5 What are those other less important  
6 reasons?

7 THE WITNESS: I did not research -- do  
8 any research to figure out what common additional  
9 reasons exist across all digital music companies.  
10 This is the one most common one that I -- that would  
11 -- that I found.

12 JUDGE STRICKLER: Are you aware of any  
13 other reasons why, in your opinion, the digital  
14 music service industry has fared poorly?

15 THE WITNESS: Well, another one would be  
16 that -- that certainty about whether one can receive  
17 a license is -- is not 100 percent. So in many  
18 cases, the licenses required to operate the service  
19 are voluntary. And because of that, a negotiation  
20 must be undertaken.

21 And a company can be started prior to it  
22 obtaining -- well, it's almost always started prior  
23 to it obtaining licenses, and then it has to engage  
24 in the activity of attempting to receive voluntary  
25 licenses. And that process is an uncertain process.

1 It can take a long time. There is evidence of  
2 companies that fail prior to receiving their  
3 licenses. Took too long, they didn't raise enough  
4 capital. So that's another example.

5 JUDGE STRICKLER: In the -- in the  
6 companies that you identified as failures in your  
7 analysis, how many of them, in your opinion, if you  
8 know, failed because of their inability to negotiate  
9 a license or the duration -- as you testified, the  
10 duration of time it took to try to get a license?

11 THE WITNESS: I don't know in total the  
12 exact number, but I did come across one that I  
13 remember, one that's called Music Bank, which is a  
14 company that raised, I think, more than 20 million  
15 dollars but was unable to receive all of its  
16 licenses and, therefore, could not launch.

17 JUDGE FEDER: When you're talking about  
18 licenses in this context, are you talking  
19 exclusively about label licenses?

20 THE WITNESS: Combination -- well, I'm  
21 speaking about voluntary licenses, and it would be  
22 the combination of, if required, voluntary  
23 publishing licenses or label licenses. But both,  
24 both would be required. In the event of compulsory  
25 publishing licenses, I'm not talking about those,

1 because those are compulsory.

2 JUDGE FEDER: Thank you.

3 MR. CHARRON: May I inquire?

4 JUDGE BARNETT: Yes.

5 MR. CHARRON: Thank you, Your Honors.

6 CROSS-EXAMINATION

7 BY MR. CHARRON:

8 Q. Good morning, Mr. Pakman.

9 A. Good morning.

10 Q. Again, my name is Bill Charron. You are  
11 a former board member of the Digital Media  
12 Association or DiMA; is that right?

13 A. Yes.

14 Q. And in your description of your  
15 background in your written report in this case and  
16 your Appendix A section to that report, you omitted  
17 -- you omitted mentioning that fact, right?

18 A. I don't recall whether I put that on  
19 there or not.

20 Q. You can take a look. I can tell you I  
21 didn't see it.

22 A. I trust your observation.

23 Q. Okay. And --

24 JUDGE STRICKLER: It wasn't on his CV?  
25 Is that what you're saying?

1 MR. CHARRON: His CV and also background,  
2 pages 1 through 3 of his report, his background.

3 JUDGE STRICKLER: Seems to be missing  
4 from both?

5 MR. CHARRON: Correct.

6 BY MR. CHARRON:

7 Q. You were also a cochair of DiMA's music  
8 licensing commission, right?

9 A. Committee.

10 Q. Committee?

11 A. Yes.

12 Q. And you omitted mentioning that in your  
13 report in this proceeding as well, correct?

14 A. I did not acknowledge that.

15 Q. And DiMA's mission is to "promote  
16 business and regulatory environments that support  
17 DiMA's members' growth and success and which  
18 encourage consumers' adoption of legal media digital  
19 choices." Isn't that correct?

20 A. I don't recall DiMA's mission.

21 Q. Okay.

22 A. It was back in 1999.

23 Q. Why don't we look at -- it's called  
24 Impeachment Exhibit 5013.

25 A. I'm sorry, I don't see that here.

1 JUDGE STRICKLER: Is it in the cross  
2 binder? Or no?

3 MR. CHARRON: No, this is newly offered  
4 to address the witness' last answer.

5 JUDGE BARNETT: Has it been marked?

6 MR. WEIGENBERG: No, because it's an  
7 impeachment exhibit.

8 JUDGE BARNETT: It still needs to be  
9 marked for identification.

10 JUDGE STRICKLER: These are our  
11 companies?

12 MR. WEIGENBERG: These will be your  
13 copies.

14 JUDGE BARNETT: Thank you.

15 JUDGE STRICKLER: 5013?

16 MR. CHARRON: Yes, that's correct.

17 THE CLERK: I need the one --

18 MR. CHARRON: Yes.

19 THE CLERK: -- the one that you gave to  
20 witness so I can put a number it.

21 (Copyright Owners Exhibit 5013 was marked  
22 for identification.)

23 BY MR. CHARRON:

24 Q. This is a printout from DiMA's web site.  
25 Do you recognize it?



1           A.    No, I don't.  When was this a printout  
2   from DiMA's web site?  It says 2017.

3           Q.    Correct.  Do you see the mission  
4   statement where the first paragraph says what DiMA  
5   promotes?

6           A.    I do.

7           Q.    That's consistent with your understanding  
8   of deem DiMA's mission, correct?

9           A.    No, it's not, because I was a member of  
10  DiMA back in 1999, maybe early 2000s, and I don't  
11  recall what their mission was then.  So I can't tell  
12  you if this is consistent with it then.

13          Q.    Okay.  You think their mission might have  
14  been fundamentally different from what it says here?

15          A.    I didn't say I think it might be  
16  fundamentally different, but I just can't tell you  
17  if this is consistent with what it was then.

18          Q.    Okay.  At the time that you were a  
19  member, did DiMA also, as it says in paragraph 3,  
20  represent its members in industry negotiations and  
21  rate setting proceedings that determine significant  
22  royalties?

23          A.    Yes.

24          Q.    So it's fair to say that DiMA's objective  
25  in representing its members in industry negotiations

1 and rate setting proceedings is to reduce artist and  
2 music publishing royalty rates as much as possible,  
3 correct?

4 A. I don't believe that was true.

5 Q. DiMA's members include, among other  
6 companies, Amazon, Pandora, and Spotify, correct?

7 A. I don't know DiMA's current membership.  
8 Those -- I don't believe Amazon nor Spotify were  
9 members when I was there.

10 Q. The -- those are your clients in this  
11 proceeding, right, together with Google?

12 A. My clients?

13 Q. They've retained you?

14 A. Yes.

15 Q. And DiMA -- are you aware that DiMA  
16 itself was initially a party in this proceeding as  
17 well, aligned with Amazon, Pandora, Spotify, and  
18 Google?

19 A. I'm not.

20 Q. Is it fair to say that if DiMA had been a  
21 party, you would have declined this expert  
22 engagement? That would have at least given an  
23 appearance of bias by you; wouldn't you agree?

24 A. I did not consider that question. I  
25 don't know.

1           Q.    Regardless of DiMA's presence or  
2 non-presence in the proceeding currently, your role  
3 as a former -- withdrawn.

4                   Your opinion offered in this proceeding  
5 is as putative expert that is that the music  
6 publishing royalty rates should be reduced by this  
7 body, correct?

8           A.    My opinion is they should certainly not  
9 be increased. And I'm hopeful that it will be  
10 reduced.

11           Q.    Not necessarily reduced, though?

12           A.    I'm sorry?

13           Q.    You're saying your opinion is not that it  
14 should be reduced?

15           A.    I do believe that rates are too high.  
16 That's what my evidence showed.

17           Q.    So your opinion is that rates should be  
18 reduced?

19           A.    In the service of creating a healthier  
20 industry, I do believe rates should come down.

21           Q.    Would you turn to paragraph 13 of your  
22 report, which is on page 4. And here you explain  
23 that you reached your opinions in your report based  
24 on your "long personal experience in this industry,"  
25 your "evaluation of potential investments while at

1 Venrock," and your "review of the materials listed  
2 in Appendix B."

3           You did not conduct any surveys of any  
4 kind, correct?

5           A.    No.

6           Q.    You did not create any economic models,  
7 correct?

8           A.    No.

9           Q.    When you say no, you mean yes, that I'm  
10 correct, right?

11          A.    Oh, sorry. No, I did not create any  
12 economic models.

13          Q.    You did not perform any regression  
14 analyses, correct?

15          A.    I did not perform a regression analysis.

16          Q.    Your opinions in your report are  
17 primarily experiential in nature; fair to say?

18          A.    No, they're based on research.

19          Q.    I'd like to discuss your experience in  
20 evaluating potential investments while at Venrock.  
21 In paragraph 2 of your report on page 1, you say  
22 that "Venrock invests in early-stage Internet  
23 technology and healthcare companies and works to  
24 build them into successful, stand-alone, high-growth  
25 businesses." These are the kinds of businesses that

1 Venrock is interested in potentially capitalizing,  
2 right?

3 A. Yes.

4 Q. And as you said, other kinds of  
5 businesses that are parts of markets -- let me  
6 rephrase that. Other kinds of businesses are parts  
7 of markets that are "not in favor by Venrock,"  
8 correct?

9 A. I'm sorry, can you repeat the question?

10 Q. Other kinds of businesses than the ones  
11 you've identified in paragraph 2 are parts of  
12 markets that you said on your direct testimony are  
13 "not in favor by Venrock"?

14 A. I'm having trouble understanding the  
15 question.

16 Q. Okay. Venrock is not interested in  
17 investing in a company like Amazon or Google or  
18 Apple as those companies are configured today,  
19 correct?

20 A. We don't invest in public companies.  
21 Well, we -- we do have two funds, but the fund that  
22 I'm referring to here does not invest in public  
23 companies. Those are all public companies.

24 Q. Did you -- the experience that you cite  
25 in your report, is that part of both funds, only one

1 fund?

2 A. Only the -- only one fund. I did not  
3 discuss the Venrock healthcare capital partners  
4 public investment vehicle.

5 Q. Okay. By the term "standalone" -- when  
6 you say that Venrock looks to turn them into  
7 successful standalone high-growth businesses, by  
8 "standalone," you mean businesses that offer  
9 particular goods or services, not businesses that  
10 offer widely diverse ranges of goods or services  
11 such as an Apple or an Amazon; is that correct?

12 A. No, that's not what I mean.

13 Q. And what Venrock also seeks is a startup  
14 that offers a standalone business that has the  
15 potential for high growth, which would mean a high  
16 return on investment for Venrock, correct?

17 A. We seek both of those, high growth and  
18 high rates of return.

19 Q. Venrock is institutionally geared toward  
20 evaluating businesses that offer goods or services  
21 that have the potential to be highly profitable on  
22 an accounting basis. Do I have that right?

23 A. Yes.

24 Q. And Venrock hopes to be able to sell or  
25 merge those standalone businesses with other

1 companies to make a large accounting profit,  
2 correct?

3 A. I wouldn't describe it that way. The  
4 first goal is -- would be to capitalize our -- to  
5 experience our liquidity event through an IPO so the  
6 company remains independent and grows, as we did  
7 with Apple and Intel, and to experience liquidity  
8 that way and provide the return that way. That  
9 would be our first choice.

10 Q. Can you turn to page 4, paragraph 13A.  
11 You say that the digital music service industry has  
12 fared poorly due primarily to music licensing  
13 royalty rates, including payments to both publishers  
14 and owners of sound recordings that are too high.

15 And Judge Strickler asked you about this  
16 a few minutes ago. You repeated in your direct  
17 testimony that your research shows that companies in  
18 this space have royalty obligations, and the payment  
19 of those royalties leaves very little margin left  
20 for the company. That's your opinion, correct?

21 A. Yes, it is.

22 Q. All right. So I want to break up your  
23 statement in paragraph 13A. You say that the  
24 digital music service industry has fared poorly.  
25 Would you turn in your binder to what is marked as

1 CO Exhibit H-2898?

2 MR. CHARRON: Your Honor, I'm sorry, if I  
3 failed to offer the prior exhibit, 5013, I meant to  
4 offer that.

5 JUDGE STRICKLER: That's the impeachment  
6 exhibit?

7 MR. CHARRON: Yes.

8 MR. STEINTHAL: What's being offered?

9 MR. CHARRON: 5013.

10 JUDGE BARNETT: The impeachment exhibit.  
11 I don't think it has to be admitted.

12 BY MR. CHARRON:

13 Q. All right. Have -- you're familiar with  
14 the Recording Industry Association of America, or  
15 RIAA?

16 A. I am.

17 Q. Do you consider the RIAA's data on record  
18 label revenues and/or sales to be reasonably  
19 accurate?

20 A. I believe it probably is, yes.

21 Q. If you look at figure 2 on Exhibit 2898,  
22 it says that the number of paying subscribers for  
23 on-line music services was about 7.9 million in the  
24 first half of 2014. Do you see that?

25 A. Yes.



1 Q. And it says that the number of paying  
2 subscribers for those services --

3 JUDGE STRICKLER: Hang on.

4 JUDGE BARNETT: I'm sorry, Mr. Charron.  
5 If you're going to get into the contents, we need to  
6 have this admitted.

7 MR. CHARRON: Oh, I move first? I  
8 apologize. I move for the admission. Oh, it is  
9 admitted? It is admitted.

10 JUDGE STRICKLER: I think it was  
11 previously admitted through another witness?

12 JUDGE BARNETT: 2898.

13 MR. WEIGENBERG: Yes, Your Honor, in the  
14 past -- past couple days, it was admitted through, I  
15 believe, through Dr. Marx. I believe it was  
16 admitted through Dr. Marx, Your Honor.

17 THE CLERK: Admitted on March 20th.

18 JUDGE BARNETT: Thank you.

19 MR. CHARRON: I apologize.

20 JUDGE BARNETT: Go ahead.

21 BY MR. CHARRON:

22 Q. Okay. So, again, looking at figure 2,  
23 RIAA reports the number of paying subscribers for  
24 on-line music services grew to about 9.1 million in  
25 the first half of 2015, correct?

1 A. Yes.

2 Q. And that number grew again to about 18.3  
3 million in the first half of 2016, correct?

4 A. Yes.

5 Q. So although you describe the digital  
6 music service industry as "faring poorly," the  
7 number of paying on-line digital music subscribers  
8 actually more than doubled over the course of just  
9 two years; isn't that correct?

10 A. Subscribers have doubled, but profits  
11 remain elusive and failure rate is high.

12 Q. Okay. But I'm asking about subscribers.  
13 The number of subscribers has doubled, you agree?

14 A. I agree.

15 Q. And you didn't say anything about that in  
16 your report; you just -- in fact, you didn't address  
17 this fact at all in your report, correct?

18 A. I didn't because the growth of  
19 subscribers does not seem to have bearing on the  
20 failure rates in the industry.

21 Q. Would you turn to -- in your binder, to  
22 Exhibit H-2780. Are you familiar with Nielsen  
23 music?

24 A. I'm familiar with Nielsen.

25 Q. And have you ever seen their music U.S.

1 report?

2 A. I may have. I don't recall specifically  
3 if I have.

4 MR. CHARRON: Your Honors, I move for  
5 admission of Exhibit H-2780.

6 MR. STEINTHAL: No objection.

7 JUDGE BARNETT: 2780 is admitted.

8 (Copyright Owners Exhibit Number 2780 was  
9 marked and received into evidence.)

10 BY MR. CHARRON:

11 Q. Would you turn to page 8 of this exhibit.  
12 On the bottom category, on-demand music streams, you  
13 see it recites the number of music -- audio music  
14 streams rose from 79.1 million to 144.9 million  
15 between 2014 and 2015?

16 A. I do.

17 Q. Do you have any reason to think that that  
18 data is inaccurate?

19 A. No.

20 Q. So the number of music streams has risen  
21 substantially as well, correct?

22 A. Stream growth continues, no profits and  
23 high failure rates.

24 Q. Okay. But were you aware of the rise in  
25 demand for digital music at the time you wrote the

1 report in this proceeding?

2 A. I'm aware of the growth of streaming,  
3 yes.

4 Q. Are you aware that Pandora has, as of  
5 March 15th of this year, last week, started a full  
6 subscription interactive streaming service called  
7 Pandora Premium?

8 A. Yes, I'm aware they added those features.

9 Q. You're aware of Spotify, of course. They  
10 launched in 2011, right?

11 A. In the U.S. They were outside the U.S.  
12 prior to that.

13 Q. So they've been in business in the U.S.  
14 for six years and -- and going. And, in fact, as  
15 you noted on your direct, Spotify raised about a  
16 billion dollars in convertible debt financing last  
17 year, correct?

18 A. Yes, under very severe terms, I -- I did  
19 note that.

20 Q. Well, we -- I think that might have been  
21 addressed previously by the panel.

22 A. You were just asking what I was aware of.

23 Q. Spotify -- Spotify has been valued at  
24 over 8 billion dollars; isn't that also correct?

25 A. Private investors have invested under

1 those terms, yes.

2 Q. And its equity already trades even though  
3 it's not a public company as yet, correct?

4 A. I'm not specifically aware of how it  
5 trades or doesn't trade.

6 Q. Three new on-line digital music services  
7 also launched last year alone, right, SoundCloud Go,  
8 Amazon Music Unlimited, and iHeart Media All Access.  
9 Are you aware of that?

10 A. Yes, I'm aware that these features are  
11 added to existing music services.

12 Q. Right.

13 A. I wouldn't characterize them as new  
14 entrants or new launches.

15 Q. Prior to that, in 2015, Apple Music and  
16 TIDAL were launched or relaunched, correct?

17 A. Yes.

18 Q. And so although you describe the digital  
19 music service industry as "faring poorly," providers  
20 of on-line digital music continue to enter the  
21 market, right?

22 A. I believe the -- the features are  
23 evolving of the services that you just mentioned,  
24 and I don't think that is indication that there is  
25 new entrants. And I also think that the fact that

1 these additional features have been added does not  
2 counteract the fact that none of these companies are  
3 achieving any profitability and the failure rates  
4 are higher than other industries.

5 Q. Okay. But you --

6 A. That's why I conclude that it's not  
7 faring well, not exclusively looking at growth.

8 Q. But you were aware of these companies  
9 entering the market over the last year or two,  
10 correct?

11 A. I am aware that they added these  
12 features, yes.

13 Q. Would you turn to Exhibit H-2640.

14 MR. CHARRON: Your Honor, I will, before  
15 I forget, move for admission of H-2640.

16 MR. STEINTHAL: Is that the Nielsen  
17 report?

18 MR. CHARRON: No, it's a Variety article.

19 JUDGE BARNETT: Let's -- yeah, let's  
20 identify it for the record.

21 MR. CHARRON: This is a --

22 JUDGE BARNETT: Let's have the witness  
23 identify it, if he can.

24 JUDGE STRICKLER: This time you jumped  
25 the gun.

1 MR. CHARRON: I'll find equilibrium  
2 eventually, I promise.

3 BY MR. CHARRON:

4 Q. Do you know what Deezer is, Mr. Pakman?

5 A. Yes.

6 Q. It's an on-line music streaming service,  
7 correct?

8 A. Yes.

9 Q. Were you aware at the time you prepared  
10 your report that Deezer raised more than 100 million  
11 dollars in financing in 2016 as reported in  
12 Exhibit H-2640?

13 A. I was aware that Warner was propping up  
14 Deezer with additional financing, yes.

15 MR. CHARRON: I move for the admission of  
16 2640.

17 MR. STEINTHAL: I would not object that  
18 it is a press report. I -- as long as it's admitted  
19 solely for the limited purpose of identifying that  
20 this report was in the press and not for this  
21 specific truth of matters within therein.

22 JUDGE STRICKLER: Potentially fake news?  
23 (Laughter).

24 JUDGE BARNETT: 2640 is admitted.

25 (Copyright Owners Exhibit Number 2640 was

1 marked and received into evidence.)

2 BY MR. CHARRON:

3 Q. Would you turn to Exhibit 2641,

4 Mr. Pakman. You've heard of SoundCloud?

5 A. I have.

6 Q. SoundCloud is another on-line streaming  
7 service?

8 A. Yes.

9 Q. Were you aware at the time you prepared  
10 your report that SoundCloud raised about 70 million  
11 dollars in 2016?

12 A. Yes, and I'm also aware of the trouble  
13 that company is in and it may now file for  
14 bankruptcy.

15 MR. CHARRON: I move for admission of  
16 2641.

17 MR. STEINTHAL: On the same basis as my  
18 prior comment, I have no objection.

19 JUDGE BARNETT: 2641 is admitted.

20 (Copyright Owners Exhibit Number 2641 was  
21 marked and received into evidence.)

22 BY MR. CHARRON:

23 Q. Would you turn to Exhibit H-2752. You've  
24 heard of TIDAL, correct?

25 A. I have, yes.



1 Q. Another on-line digital music service,  
2 right?

3 A. Yes.

4 Q. Were you aware at the time you prepared  
5 your report that TIDAL received a 200 million dollar  
6 investment in 2016 from Sprint?

7 A. I don't recall the date that this  
8 investment happened, but I am aware now that -- of  
9 this investment. And I think it is a good example  
10 of what we were talking about earlier, about how  
11 large companies with existing user bases can  
12 probably use their large user bases to drive some  
13 additional growth for music services.

14 JUDGE BARNETT: I'm sorry.

15 MR. CHARRON: I move for the admission of  
16 2752.

17 JUDGE BARNETT: Thank you. I was just  
18 going to ask again for the number.

19 MR. STEINTHAL: No objection on the same  
20 basis.

21 JUDGE BARNETT: 2752 is admitted.

22 (Copyright Owners Exhibit Number 2752 was  
23 marked and received into evidence.)

24 BY MR. CHARRON:

25 Q. The -- the 200 million dollar investment

1 by Sprint, that was not a case of a "investment from  
2 the balance sheet of an existing large company" as  
3 you testified on your direct, right?

4 A. I think it is. I believe that Sprint  
5 probably used 200 million dollars from their balance  
6 sheet to make the investment. They're an existing  
7 large company.

8 Q. Have you read Dr. Michael Katz's  
9 testimony in this proceeding?

10 A. I don't believe so, no.

11 Q. Are you aware that he testified at  
12 page -- transcript page 667, lines 18 through 23,  
13 that "the industry was optimistic that given the  
14 current structure and their views about going forth  
15 -- and here by industry I mean the streaming  
16 services -- that the market was functioning on that  
17 side and that we are seeing sufficient investment"?

18 A. I don't know what you're reading from.  
19 I'm sorry. I don't have it in front of me. I --

20 Q. You're unaware of Dr. Katz giving that  
21 testimony in this proceeding?

22 A. I don't -- I don't recall being aware of  
23 it, no.

24 Q. Are you aware that he's Pandora's expert  
25 in this case?

1           A.    I -- I'm not, no.

2           Q.    And Pandora is one of the companies that  
3 retained you, correct?

4           A.    Yes.

5           Q.    So, again, although you describe the  
6 digital music service industry as "faring poorly,"  
7 providers of on-line digital music continue to be  
8 able to attract more than hundreds of millions of  
9 dollars from financiers and investors, correct?

10          A.    I think there's ample evidence that the  
11 large companies are filling in the gaps now as  
12 investors, where many institutional investors are no  
13 longer prepared to make investments. But I do think  
14 cherry-picking a few examples of this doesn't change  
15 the evidence that I've presented in my testimony  
16 that this sector does not attract as much investment  
17 capital from VCs as other technology sectors do.

18               JUDGE STRICKLER: Is one of the reasons  
19 -- I mean, you said that the primary reason is high  
20 royalty rates. But is it -- let me ask you the  
21 question. Is it also a problem that royalty rates  
22 are uncertain in part because they're set and not --  
23 not necessarily the mechanical -- well, let's just  
24 leave it at that. Is it because mechanical rates  
25 are set by statute, by us, as opposed to the

1 marketplace? Is that a factor?

2 THE WITNESS: So, usually, at the time of  
3 the investment, there is an understanding of  
4 generally what the royalty rates have recently been,  
5 and I think give you a proxy for figuring out what  
6 they will be around the time of launch.

7 Unless there's a voluntary license  
8 negotiation required, then there is uncertainty. We  
9 don't know what the outcome will be. But there  
10 certainly is ongoing certainty, given that some  
11 rates change over time through proceedings like  
12 this. And that uncertainty leads to higher risk,  
13 for sure.

14 JUDGE STRICKLER: The higher -- the  
15 largest percentage of the royalty rates are paid --  
16 royalties are paid for the sound recording rights,  
17 correct?

18 THE WITNESS: Yes.

19 JUDGE STRICKLER: Those are in the  
20 marketplace?

21 THE WITNESS: Yes.

22 JUDGE STRICKLER: And is part of the  
23 concern at all by venture capitalists that the  
24 market power of those licensors is such that perhaps  
25 there won't be a sufficient return given the

1 exercise of that market power by the licensors?

2 THE WITNESS: Absolutely. The licensors  
3 can make a binary decision on a new company entering  
4 the market. If they choose to license them, then  
5 the company can enter the market. If they choose  
6 not to, the company cannot.

7 So there is a high level of uncertainty  
8 for -- on behalf of a venture investor when  
9 investing in a startup that does not yet have any  
10 licenses. Don't know if they'll be to achieve them.

11 And just to answer your question a little  
12 more fully, we know that the rightsholders have all  
13 the leverage in that conversation. And so you're  
14 really at the largesse of the -- of the record  
15 labels in that case.

16 JUDGE STRICKLER: That being the case,  
17 what is the -- what is the impact of -- whether or  
18 not a venture capitalist will or will not invest in  
19 these companies, what is the impact of what we're  
20 doing here on that decision?

21 THE WITNESS: Well, to the extent that  
22 rate proceedings like this make adjustments to rates  
23 that result in more profit for --

24 JUDGE STRICKLER: Well, I don't want to  
25 talk about rate proceedings like this.

1 THE WITNESS: Okay, I'm sorry.

2 JUDGE STRICKLER: I want to talk about  
3 this rate proceeding.

4 THE WITNESS: Yes.

5 JUDGE STRICKLER: If -- if the amount  
6 that's paid in the marketplace to these licensors --  
7 you say you're at their largesse because of the  
8 nature of their power and that's the predominant  
9 royalty that is paid, how does tweaking this, the  
10 rate at the mechanical royalty level, change --  
11 change that calculus, given -- given your expertise  
12 in venture capital?

13 THE WITNESS: Yes, Your Honor, I  
14 understand the question. The digital music  
15 companies, operators, view their royalty rates in  
16 the totality of the combination of all rates that  
17 are implicated and all -- they look at that as total  
18 cost.

19 And the -- the mechanical and the  
20 performance royalties associated with the sound  
21 recording -- with the proposition are not de  
22 minimis. They're meaningful, particularly at scale.

23 So while I appreciate that largely one is  
24 larger than the other, it's the combination of both  
25 that result in the gross margin, and -- and a shift

1 in gross margin somewhat in either direction can  
2 be -- can be the difference between a positive or  
3 negative outcome. So I believe what we're -- what  
4 we're doing here is meaningful to a venture  
5 investor's decision about whether a company can  
6 become profitable.

7 JUDGE STRICKLER: So on the margin,  
8 you're saying, this might make the difference?

9 THE WITNESS: Let's quantify what you  
10 mean by "margin." I mean on gross margin like on  
11 the accounting definition, but not like in the sense  
12 of it barely matters.

13 JUDGE STRICKLER: Thank you.

14 BY MR. CHARRON:

15 Q. Mr. Pakman, isn't it possible that  
16 venture capitalists are not investing, according to  
17 you, because there are already large, well-financed  
18 companies in this sector?

19 A. Well, my research looked back across a  
20 long period of time before many of the companies  
21 that are now in digital music were in digital music.  
22 It is possible that -- I mean, venture capitalists  
23 do consider what the marketplace looks like and what  
24 it may look like over time. And, certainly,  
25 competing against large companies factors into the

1 analysis.

2 But I don't believe it is the primary  
3 reason because there's plenty of other examples of  
4 venture capitalists investing in companies in other  
5 sectors where many large players exist, and the  
6 belief is that the small companies can still be  
7 successful, can disrupt the large companies in some  
8 way.

9 Q. Returning to paragraph 13-A of your  
10 report, and your language that the industry is  
11 faring -- faring poorly in your opinion, "due  
12 primarily to music licensing royalty rates that are  
13 too high," Judge Strickler asked you on your direct  
14 about what other cost inputs you could think of.

15 If you turn to paragraph 25 --

16 A. I'm sorry, I don't believe he asked me  
17 what other cost inputs I could think of.

18 Q. Oh, I apologize if I -- if I misheard  
19 him. But if you turn to paragraph 25 on page 9 of  
20 your report, on the bottom of that page, you  
21 identify other cost inputs here, right, overhead,  
22 marketing, staff, technology costs, correct?

23 A. I do identify these other costs.

24 Q. And you didn't offer an analysis of where  
25 each of these inputs ranks specifically along any



1 kind of causation scale when you offered your  
2 opinion about the industry faring poorly due  
3 primarily to music licensing royalty rates, correct?

4 A. I'm sorry, I don't understand the  
5 question.

6 Q. You simply identified music licensing  
7 royalty rates as the primary cause for your belief  
8 that the industry is faring poorly, without  
9 analyzing any of these other cost inputs, correct?

10 A. I agree with the first half of your  
11 statement, but not the second, because clearly I do  
12 consider that these costs exist, but I don't believe  
13 that these costs are the primary reason.

14 Q. But you didn't do any analysis to look at  
15 any of these costs specifically to support your  
16 intuition, did you?

17 A. I have an awareness as a former  
18 entrepreneur and operator of companies what the  
19 typical costs for marketing and credit card charges  
20 and overhead and tech costs are.

21 Q. Your report doesn't offer anywhere any  
22 analysis of any of these other cost inputs; isn't  
23 that correct?

24 A. I did not provide that analysis.

25 Q. And on direct, you answered Judge

1 Strickler by saying you didn't even try to do that  
2 kind of analysis, right?

3 A. I don't believe Judge Strickler asked me  
4 this question.

5 Q. Your report doesn't analyze how much is  
6 actually spent by digital music providers on, for  
7 example, marketing costs, right?

8 A. I'm sorry, just -- can you repeat the  
9 question?

10 Q. Your report does not analyze how much is  
11 actually spent by digital music providers on  
12 marketing costs; isn't that correct?

13 A. It is correct.

14 Q. And marketing costs are directed at  
15 keeping up with competition or trying to get ahead  
16 of competition. Would you agree with that?

17 A. My report focused largely on cost of  
18 goods --

19 Q. I'm asking --

20 A. -- but marketing is not a cost of goods.

21 Q. I asked a different question. I asked if  
22 you would agree that marketing costs are addressed  
23 to keeping up with competition or getting ahead of  
24 competition in a particular space?

25 A. I think marketing costs have other

1 bearing on a company. Those are some of the -- some  
2 of the reasons why one engages in marketing.

3 Q. You would agree that the digital music  
4 industry is competitive among providers who all  
5 offer the same ultimate product, which is the  
6 ability to listen to music, right?

7 A. Are you saying that all of the services  
8 are the same?

9 Q. I did not say that. I asked you if you  
10 agreed that this industry is competitive.

11 A. Okay. That's a different question than  
12 the first one you asked. Do you want me to answer  
13 just that question?

14 Q. Yes.

15 A. Yes, it's a competitive industry.

16 Q. Does quality of management factor into  
17 your causation analysis at all or -- let me -- let  
18 me rephrase that.

19 Did you consider quality of management as  
20 a factor when you offered your opinion that the  
21 industry is faring poorly due primarily to licensing  
22 rates?

23 A. I believe that venture investors, which  
24 is what this report is concerned with, always make a  
25 determination as to the quality of a team, no matter

1 which sector they're entering. We also look to see  
2 their domain experience or try to assess the  
3 likelihood of them doing well in certain sectors.

4           So common amongst all the venture-backed  
5 companies would be the assumption that venture  
6 investors did consider whether -- the quality of the  
7 team before making the investment.

8           Q.    Would you say that the quality of  
9 management is perhaps the single-most important  
10 consideration in evaluating opportunities by venture  
11 capitalists?

12          A.    I can't speak for every venture  
13 capitalist. We all have a different set of criteria  
14 we individually choose to make a decision, so I  
15 can't --

16          Q.    Do you disagree with that statement as a  
17 general proposition?

18          A.    Again, I can't speak for all of them. I  
19 can't say it's the primary --

20                JUDGE STRICKLER: How about for yourself?

21                THE WITNESS: I consider largely three  
22 factors, team, market, product -- four, sorry, team,  
23 market, product, and business model.

24                JUDGE STRICKLER: In that -- in that  
25 order, team, product?

1 THE WITNESS: Yeah, I mean, it's a --

2 JUDGE STRICKLER: That was the -- the  
3 question was do you consider -- I'm taking you to  
4 say "team" as meaning management. The question was  
5 do you consider management as the -- well, he was  
6 asking you about the industry, whether the industry  
7 considers management --

8 THE WITNESS: Yes, sir.

9 JUDGE STRICKLER: --- as the primary  
10 issue with regard to the --

11 THE WITNESS: Yes.

12 JUDGE STRICKLER: -- the qualification of  
13 the potential firm for investment. And you said you  
14 didn't know in the industry, so now the question --

15 THE WITNESS: Yeah.

16 JUDGE STRICKLER: -- I'm asking you is,  
17 well, how about for yourself?

18 THE WITNESS: I generally consider team  
19 to be the most important criteria. It's different  
20 than others. But -- but all four play a major  
21 factor in the determination.

22 JUDGE STRICKLER: All four being --

23 THE WITNESS: Team, market, product, and  
24 business model.

25 BY MR. CHARRON:

1           Q.    But you didn't discuss quality of  
2 management anywhere in your report in this  
3 proceeding, correct?

4           A.    No, I did not.

5           Q.    Does the newness of a market itself  
6 factor into analyzing whether an industry is faring  
7 well or poorly at a given point?

8           A.    No, I don't believe that time is an  
9 indication of how well a market is performing.

10          Q.    So you don't believe that there's any  
11 sort of learning curve element or and evolutionary  
12 component to an industry that might start off not  
13 doing as well as it might do later when it's more  
14 establish?

15          A.    So your first question, I believe a  
16 market can be performing well in its early stages,  
17 its mid stages, and its late stages. Your second  
18 question is, is there a learning curve in markets?  
19 Is that the question?

20          Q.    My question is whether you considered the  
21 existence of a learning curve -- well, withdrawn.  
22 Yes.

23                   Do you agree that there can be -- that  
24 there is a learning curve that should be factored  
25 into the evaluation of whether an industry is doing

1 well or poorly at any given time?

2 A. As you state the question, it's hard for  
3 me to agree that way.

4 Q. Does the level of competition among  
5 suppliers matter to an analysis of whether an  
6 industry is faring well or poorly?

7 JUDGE STRICKLER: You're referring to the  
8 suppliers to that industry?

9 MR. CHARRON: Correct, Your Honor.

10 JUDGE STRICKLER: All right.

11 THE WITNESS: Sorry, could you repeat the  
12 question one more time?

13 BY MR. CHARRON:

14 Q. Does the level of competition among  
15 suppliers matter to the evaluation of whether an  
16 industry is doing well or poorly?

17 A. I think it's a factor in determining  
18 whether a -- how well a market is doing, yes.

19 Q. And your report doesn't analyze either  
20 how long the digital music market has been in  
21 existence or the level of competition within that  
22 market over time, right?

23 A. The report does look at the -- the  
24 entirety of venture capital activity investments  
25 throughout the history of digital music, so I think

1 it does consider time and -- and makes a judgment  
2 about the success over that period of time.

3 Q. Of venture capitalists?

4 A. Yes, the report is about venture capital  
5 activity into the digital music, mobile, eCommerce,  
6 and SaaS companies.

7 Q. As between mechanical and sound recording  
8 royalties, which is a greater factor in causing the  
9 digital music service industry to "fare poorly," in  
10 your opinion?

11 A. Venture capitalist -- I'm sorry,  
12 operators of digital music services view the  
13 totality of all royalty obligations as their total  
14 cost of goods. And it's the sum of all of them that  
15 manifests --

16 Q. That wasn't -- I'm sorry, that wasn't my  
17 question. My question to you as an expert is, as  
18 between mechanical and sound recording royalties,  
19 which is a greater factor in causing the digital  
20 music service industry to fare poorly, in your  
21 opinion?

22 A. I did not analyze that.

23 Q. And sitting here today, you can't offer  
24 an opinion on whether it's sound recording royalties  
25 are more of a cause than mechanical royalties?



1           A.    I do appreciate the differences between  
2 the two. But I'd have to analyze a number of  
3 factors to figure out which is a cause. I believe  
4 they both have impact, for sure. But I -- but I do  
5 know that as an operator of a music service, we  
6 looked at the total. The total was what was key and  
7 most important. And when the total is such that  
8 very little is left after revenues minus costs, I  
9 mean, you can't operate a service without both. So  
10 we need to -- we need to find out what the total is  
11 to know.

12               MR. CHARRON: I'm going to get into a  
13 line of questioning, Your Honor, that will have  
14 restricted content.

15               JUDGE BARNETT: Okay. You can do that  
16 after our morning recess. 15 minutes.

17               (A recess was taken at 10:43 a.m., after which  
18 the hearing resumed at 11:02 a.m.)

19               JUDGE BARNETT: Please be seated. Ladies  
20 and gentlemen, in a few minutes, we're going to have  
21 a test of our emergency --

22               JUDGE FEDER: Alert.

23               JUDGE BARNETT: -- alert system. Thank  
24 you. It should only affect library-issued cell  
25 phones. And I think ours are in the other room and

1 turned off -- oh, and computers. But the clerk,  
2 Ms. Whittle -- I feel terrible calling her the  
3 clerk. Ms. Whittle has both her phone and computer  
4 on. So if you hear something, remember this is a  
5 test, this is only a test. Mr. Charron?

6 MR. CHARRON: As I indicated, I have a  
7 very, very brief line of questioning that involves  
8 some restricted content.

9 JUDGE BARNETT: If -- if there's anyone  
10 in the courtroom who is not permitted to hear  
11 privileged, restricted, or confidential information,  
12 please wait outside.

13 (Whereupon, the trial proceeded in  
14 confidential session.)

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1 O P E N S E S S I O N

2 JUDGE BARNETT: I don't think anyone went  
3 out, but we do need to reopen the door.

4 MR. ZAKARIN: At least one person went  
5 out.

6 JUDGE BARNETT: Thank you.

7 MR. CHARRON: Thank you.

8 BY MR. CHARRON:

9 Q. Let's turn to page 4, paragraph 13-C of  
10 your report. You say that the total dollar amount  
11 of payments to music rightsholders has been  
12 depressed, in your opinion. Do you see that?

13 A. Yes.

14 Q. It's your opinion that by reducing music  
15 publishing royalties, more total dollars will be  
16 paid to music publishing owners? Do I have that  
17 right?

18 A. I believe that lowering the total royalty  
19 burden paid by interactive digital music services,  
20 that more services can enter the market, more  
21 investment can return, and there's a higher  
22 likelihood that those services will reach  
23 profitability. And from that, I conclude there's a  
24 higher likelihood that they will stay in business.

25 And I believe then the total amount of

1 royalties paid, if there are more companies  
2 operating more broadly, to rightsholders can  
3 increase.

4 Q. Music publishing owners get paid because  
5 of a demand for the music, right? Music publishing  
6 owners don't get paid just because a supplier  
7 happens to exist? They get paid --

8 A. I agree that the services actually have  
9 to have revenue and customers.

10 Q. And so do you believe that if music  
11 publishing royalties were to drop, that prices to  
12 consumers would drop as a result and, as a result of  
13 that, there might be more overall demand for digital  
14 music? Is that your opinion?

15 A. I do have that opinion.

16 Q. But you haven't analyzed whether  
17 suppliers of digital music will actually reduce  
18 their own prices to consumers if music publishing  
19 royalties drop, have you?

20 A. I have some personal experience with  
21 this.

22 Q. It's not in your report, though, correct?

23 A. No, it's not.

24 Q. So, for example, if music publishing  
25 royalties were to drop by 2 percent, you have not

1 analyzed in your report whether those cost savings  
2 would be passed directly to consumers or whether  
3 they might, for instance, be used to increase  
4 marketing?

5 A. I did not do that analysis.

6 Q. You would agree, wouldn't you, that more  
7 supply of a good or a service does not necessarily  
8 mean there will be more demand for that good or  
9 service, correct?

10 A. Specifically, can you -- can you tell me  
11 what you mean by "more supply"?

12 Q. If there are more suppliers of a good or  
13 service, that doesn't necessarily mean there will be  
14 more demand for that good or service that they're  
15 supplying, correct?

16 A. It doesn't necessarily mean, but there  
17 are examples where more supply can equal larger  
18 demand.

19 Q. Isn't it the case with on-line digital  
20 music that even just one supplier with rights to a  
21 particular song, say, "Jumping Jack Flash" by the  
22 Rolling Stones, can satisfy the demand for anyone  
23 and everyone in the world who has access to the  
24 Internet and who would also like to listen to that  
25 song?

1 A. I don't believe that statement is true.

2 Q. Turning to paragraph 18 of your report,  
3 also on page 6, you refer to four factors, and you  
4 say that these combined factors make Venrock and  
5 other investors skeptical that they will earn a  
6 meaningful return on their invested capital.

7 Do you see that?

8 A. Yes.

9 Q. And, once again, this isn't based on any  
10 kind of formal survey of any other investors by you,  
11 correct?

12 A. No, it's just based on the research I  
13 laid out in the report.

14 Q. When you refer in your report to "a  
15 widespread failure," among digital music providers,  
16 you're not claiming that on-line digital music is  
17 not widely available for listening, are you?

18 A. I'm not making that claim.

19 Q. Okay. And do you disagree that anyone  
20 with an Internet connection can access every song  
21 that is offered by any particular on-line service?

22 A. Well, provided they're willing to pay the  
23 price, which I think is a factor in determining  
24 whether they will.

25 Q. Do you believe that royalty rates should

1 be set based on supporting the weakest of  
2 competitors within a market?

3 A. I wasn't asked to determine how royalty  
4 rates should be set. I just followed the -- I  
5 looked at the 801(b) factors that were listed in  
6 this proceeding.

7 Q. All right. Let's turn to paragraph 27 on  
8 page 11 of your report. And this is where you  
9 discuss your work with the PitchBook Platform,  
10 correct?

11 A. Yes.

12 Q. And looking at the PitchBook Platform  
13 constituted the entirety of your outside research  
14 efforts, right? You don't say you reviewed any data  
15 from any other sources than PitchBook, correct?

16 A. No, I discuss the use of public media  
17 reports as well.

18 Q. But you don't discuss that anywhere  
19 within the analysis that you've explained in  
20 paragraph 27 or its footnotes, do you?

21 A. In -- in footnote 15, I discuss that I  
22 had to exclude 897 companies, and the process used  
23 to exclude those involved research of things other  
24 than PitchBook.

25 Q. Okay. We'll -- we'll get to that, but

1 you don't actually explain it in your footnote 15,  
2 right?

3 A. It's not explained in footnote 15.

4 Q. Did you get a waiver from PitchBook to  
5 allow you to use its content to support your report  
6 in this proceeding for which you were personally  
7 paid 800 dollars an hour?

8 A. I did not.

9 Q. Are you aware that PitchBook has terms of  
10 use?

11 A. I'm aware they have terms of use.

12 Q. Are you aware that one of those terms of  
13 use is a limitation on use that prohibits any use,  
14 other than in accordance with its, PitchBook's, fair  
15 use policy?

16 A. I'm aware of that.

17 Q. You are aware of that? Under the fair  
18 use policy, you are permitted to "incorporate  
19 limited data derived from the content into  
20 presentations and reports for use solely in  
21 connection with your internal business operations."  
22 That's your understanding, correct?

23 A. Yes.

24 Q. But your report is not being offered  
25 solely in connection with your -- even Venrock's



1 internal business operations, correct?

2 A. It is not.

3 Q. Did you get PitchBook to agree to waive  
4 its disclaimer on inaccurate content contained  
5 within its platform?

6 A. No.

7 Q. Are you aware of that disclaimer?

8 A. I'm not.

9 Q. Let's look at Exhibit 5015. I'm sorry,  
10 it's 5014. I apologize. The last one was 5013.

11 THE CLERK: 5014 is how I marked it.

12 (Copyright Owners Exhibit 5014 was marked  
13 for identification.)

14 JUDGE STRICKLER: 5014, we're saying?

15 MR. CHARRON: Correct.

16 BY MR. CHARRON:

17 Q. In particular, I'd like to direct your  
18 attention to paragraph 9 called No Warranty;  
19 disclaimer. And you had said, Mr. Pakman, that you  
20 were aware of PitchBook's terms of use, but this is  
21 the first time you're seeing this term of use  
22 regarding its disclaimer?

23 A. I have looked this over before. I can't  
24 tell you for certain I read this paragraph.

25 Q. Now, according to this provision,

1 PitchBook's content is "not intended to provide  
2 legal, accounting, investment, or financial advice  
3 and should not be relied upon in that respect."

4 Correct?

5 A. That's what it says.

6 Q. And it has a lot of all-capital language  
7 disclaiming the content as being provided as is and  
8 with all faults. Do you see that?

9 A. I do.

10 Q. All right. Returning to paragraph 27 of  
11 your report, and, in particular, footnotes 12  
12 through 15, I'd like to walk through -- I know we  
13 did some of this on your direct, but I'd like to  
14 walk through exactly what you did here.

15 So as you said, you compared what you  
16 called the digital music sector to mobile, SaaS, and  
17 eCommerce sectors in PitchBook?

18 A. Yes.

19 Q. For mobile, you say you selected the  
20 mobile vertical. By "vertical," do you mean like a  
21 box for a category or --

22 A. No, I'm using "vertical" as a definition  
23 of a market segment. But, yeah, it is a search  
24 criteria, and it is a check box.

25 Q. Okay. And mobile, PitchBook actually

1 defined it as companies whose primary revenue source  
2 comes from providing services for mobile devices or  
3 enabling mobile communications, right?

4 A. That's right.

5 Q. And you did not add any additional key  
6 words to narrow this category, correct?

7 A. I did not.

8 Q. You accepted the entirety of PitchBook's  
9 results for all of the mobile companies that were  
10 VC-backed as of October 2 of last year, correct?

11 A. That's right.

12 Q. And you didn't say this in your report,  
13 but you revealed on your direct that you had the  
14 start date of whenever data was first compiled by  
15 PitchBook?

16 A. Correct.

17 Q. And that might have gone back to 1992, I  
18 think you said, right?

19 A. It may go back earlier. I just observed  
20 in the search results that there was a company back  
21 from that early.

22 Q. Okay. In comparing the mobile sector,  
23 the SaaS sector, eCommerce sector to the digital  
24 music sector, did you consider at all the relative  
25 newness of the digital market -- digital music

1 market in your analysis?

2 A. I don't consider the digital music market  
3 new. It has been around since the mid '90s. And I  
4 think so have SaaS and eCommerce especially. So I  
5 -- I didn't consider -- I don't consider it a new  
6 market.

7 Q. For the mobile, going back to footnote  
8 12, you say that PitchBook provided you hits with  
9 10,999 companies, right?

10 A. Yes.

11 Q. And you don't identify what those  
12 companies are anywhere in your report, correct?

13 A. I did not list them, no.

14 Q. In fact, you haven't reproduced any  
15 PitchBook data for your report, have you?

16 A. I have not.

17 Q. Fair to say you could not recite all  
18 10,999 companies, sitting here now?

19 A. It's fair to say I could not.

20 Q. And no one else tried to re-create your  
21 -- well, withdrawn. Whatever these 10,999 companies  
22 were, you did not exclude any of them from the  
23 universe for running your further analysis, right?

24 A. I did not exclude any, no.

25 Q. What you did next was determine within

1 that universe how many companies had what you called  
2 non-distress the exits and how many had distressed  
3 outcomes, your term, correct?

4 A. Yes, that's right.

5 Q. And non-distressed exits, according to  
6 you, are companies that had either public  
7 investments or acquisitions, right?

8 A. And produced a -- a profitable outcome  
9 for their investors. That's what the search  
10 criteria for profitable exit is.

11 Q. And you didn't -- you didn't say this in  
12 your report, but am I correct, from your direct  
13 testimony, that a profitable outcome means return of  
14 initial capital plus at least one dollar?

15 A. Yes.

16 Q. And so you found -- you say PitchBook  
17 that reported 2,388 VC-backed mobile companies that  
18 have profitable public investments or acquisitions  
19 during your time period, right?

20 A. Yes.

21 Q. And that is 21.7 percent of the total  
22 universe of companies you looked at, right?

23 A. Yes.

24 Q. And you haven't identified anywhere in  
25 your report what those 2,388 companies were,

1 correct?

2 A. I did not.

3 Q. And you didn't do anything to confirm the  
4 accuracy of PitchBook's reporting for each of those  
5 2,388 companies that PitchBook identified; is that  
6 correct?

7 A. I did look over the results, but I did  
8 not see any inaccuracies.

9 Q. What does that mean, you looked over the  
10 results?

11 A. I looked over the results.

12 Q. How much time did you spend looking at  
13 the 2,388 companies?

14 A. Some.

15 Q. Did you spend a minute per company?

16 A. I don't recall how much time I spent, but  
17 I did spend some time looking them over.

18 Q. If you had spent a minute per company and  
19 there are 60 minutes in an hour, it would have had  
20 to have taken you over -- over 20 more hours to look  
21 at all 2,388 companies. Do you think you spent  
22 more --

23 A. I did not.

24 Q. To determine distressed outcomes, what  
25 you did was you ran an exit filter for the term

1 "distress" from those 10,999 companies, correct?

2 A. Yes.

3 Q. What is an exit filter?

4 A. PitchBook has search criteria for what  
5 happened to the company, whether it exited  
6 profitably or whether it exited distressed.

7 Q. They actually provide the term  
8 "distressed"?

9 A. Yes.

10 Q. Okay. According to you, PitchBook  
11 identified 720 companies out of the 10,999 as having  
12 distressed outcomes, correct?

13 A. Yes.

14 Q. And that was about 7 percent of the  
15 universe, right?

16 A. Yes.

17 Q. But, again, you don't identify what any  
18 of those 720 companies were, correct?

19 A. No. It was possible for anyone else to  
20 do the same searches and would have gotten the same  
21 results.

22 Q. And you didn't confirm the accuracy of  
23 each of the 720 companies that you say PitchBook  
24 identified, correct?

25 A. No, I didn't.

1           Q.    You agree, don't you, that if you had  
2 narrowed the total number of companies from 10,999  
3 to something less by adding key words to filter your  
4 results, then the percentage of companies with  
5 distressed outcomes would have been higher as a  
6 result, correct?

7           A.    I guess it depends on what the key words  
8 were.  If the key word actually narrowed it, then  
9 the math you're suggesting would result in what  
10 you're suggesting.

11          Q.    So, for example, as a hypothetical, if  
12 you had excluded three-quarters of the 10,999  
13 companies from your initial results for some reason,  
14 then the total number of companies in the universe  
15 would have been reduced to the 2,550.  You can take  
16 my word for the math if you can't do it in your  
17 head.  That's three-quarters of 10,000.

18          A.    Is this a hypothetical?

19          Q.    Yes.

20          A.    If you say that that's what the math is,  
21 I don't have any reason to disbelieve you.

22          Q.    And so if the same 720 companies with  
23 distressed outcomes were part of that hypothetical  
24 2500-and-change total universe, the percentage of  
25 companies with distressed outcomes hypothetically



1 would jump to over 28 percent, correct?

2 A. Again, I'm -- if that's what your math  
3 says.

4 Q. Okay. Turning to footnote 13, which is  
5 your work with the SaaS category. You did the same.  
6 You selected SaaS, which PitchBook defines a certain  
7 way, and you came up with a universe of 13,767  
8 VC-backed companies, right?

9 A. Yes.

10 Q. And, again, you didn't say what any of  
11 these companies are, correct?

12 A. Well, they're SaaS companies.

13 Q. But you didn't identify the 13,767 hits  
14 specifically, right?

15 A. I did not.

16 Q. And you didn't do anything to confirm the  
17 accuracy of each of those search results, right?

18 A. Not specifically.

19 Q. You then ran the same search for  
20 non-distressed exits, and you came out with 4,818  
21 companies, right?

22 A. Yes.

23 Q. And, I'm sorry, when you found the  
24 universe, you didn't try to narrow that by adding  
25 any key words, right?

1 A. I did not have to, no.

2 Q. Okay. And so you came up with 35 percent  
3 non-distressed and 7 percent distressed, according  
4 to what you did in footnote 13, correct?

5 A. Yes. Yes.

6 Q. Okay. And, again, if we hypothetically  
7 were to reduce the universe from 13,767 to something  
8 less, percentage would rise of companies with  
9 distressed outcomes, conceivably?

10 A. I just wasn't dealing with hypotheticals.  
11 I was dealing with the actual results. So I --

12 Q. And then in footnote 14, you did the same  
13 thing with the eCommerce category, correct?

14 A. I did.

15 Q. ECommerce, you provided a definition,  
16 supplied by PitchBook, right?

17 A. Yes.

18 Q. You didn't -- you came up with 4,813  
19 companies, and you didn't try to narrow that at all  
20 through the use of any key words, correct?

21 A. No, I did not require any narrowing.

22 Q. And then you came up with your results  
23 for distressed and non-distressed. So now let's  
24 look at footnote 15 concerning what you called the  
25 digital music sector.

1           Here you -- you say you selected venture  
2 capital instead of VC-backed, but if I understood  
3 your direct correctly, those are distinctions  
4 without a difference?

5           A.    Correct.

6           Q.    They have the exact same meaning  
7 according to you?

8           A.    Yes, they do. They actually are the same  
9 thing. It's the same check box.

10          Q.    Okay. The category of commerce you  
11 selected here was called consumer products and  
12 services (B2C) or business to consumer, correct?

13          A.    Yes.

14          Q.    And unlike your other footnotes, here you  
15 don't say how PitchBook defines the B2C -- B2C  
16 category, do you?

17          A.    I don't. It's a standard search  
18 definition in PitchBook.

19          Q.    Fair to say it's a broad category,  
20 though?

21          A.    Yes.

22          Q.    Also, unlike your methodology for mobile,  
23 SaaS, and eCommerce, here you did add a key word,  
24 the term "music," to narrow the total universe,  
25 right?

1           A.    Yes, I had to do that because PitchBook  
2 does not have a search category for music or digital  
3 music, whereas the other categories were  
4 preexisting.

5           Q.    And you don't say by how much that key  
6 word narrowed the universe of this category, do you?

7           A.    No.

8           Q.    Do you recall how many companies were  
9 eliminated?

10          A.    So are you asking the question what would  
11 the results have been of just venture capital-backed  
12 B2C companies?

13          Q.    Yes. Do you remember what that number  
14 was?

15          A.    I don't know that number.

16          Q.    While you were making the industry more  
17 particular for this part of your analysis, as we saw  
18 you didn't try to make any of the other industries  
19 you were using for comparisons, meaning the mobile,  
20 SaaS, and eCommerce industries, any narrower; you  
21 didn't similarly narrow any of those by the key word  
22 "music," correct?

23          A.    There would have been no reason to do  
24 that, because my analysis specifically compared  
25 venture capital investment into digital music

1 companies versus some of the other industries into  
2 which venture capitalists invest in technology. So  
3 PitchBook has automatic sorting, if you will, or  
4 predefined key words for those searches, but does  
5 not have a category for digital music. So I had to  
6 narrow it in order to get accurate results.

7 Q. According to you, PitchBook identified  
8 1,136 total VC-backed music B2C companies --

9 A. Yes.

10 Q. -- in your time period, correct?

11 A. That's correct.

12 Q. And we don't know what any of those 1,136  
13 companies specifically were, right?

14 A. Well, if you did the research, you --

15 Q. From your report.

16 A. -- you could have known.

17 Q. Now, here, whereas you accepted the total  
18 search results that PitchBook gave you for the other  
19 categories, mobile, SaaS, and eCommerce, you say you  
20 did not accept the total search results of the 1,136  
21 music B2C companies that you say PitchBook found;  
22 and, instead, you say you excluded 897 companies  
23 which were not companies in a business requiring the  
24 licensing of music or of providing music-related  
25 consumer utilities or Internet radio services or

1 whose primary application did not involve music in  
2 some way. Correct?

3 A. That's right.

4 Q. And so as a result, you ended up  
5 excluding more than three-quarters, almost  
6 80 percent, of PitchBook's results based upon that  
7 criteria that you applied, correct?

8 A. Yes, because they were not digital music  
9 companies.

10 Q. And you don't say anywhere in your report  
11 what any of those 897 companies that you excluded  
12 specifically were, right?

13 A. I don't say that.

14 Q. How long did it take you to go through  
15 all 1,136 companies to determine which you were  
16 going to exclude?

17 A. More than eight hours.

18 Q. Again, if you do just one minute per  
19 company, divided by 60 minutes per hours, then 1,136  
20 would be about 19 hours. That's if you spent one  
21 minute per company.

22 You say you spent about eight hours.

23 A. I did. It was more than eight hours. I  
24 don't remember the exact amount. It could have been  
25 ten, but it was certainly on that order.

1 Q. The companies that you excluded were not  
2 excluded according to any PitchBook filter, right?  
3 You excluded them in your own mind?

4 A. Well, they were -- I did incorporate  
5 PitchBook data. That is, PitchBook has information  
6 on companies, explains the business they're in, and  
7 so I did utilize some of PitchBook's information to  
8 make that determination.

9 Q. You said earlier that you had revealed  
10 everything so that somebody else could re-create  
11 your work, but with respect to --

12 A. I said they could have done these  
13 searches.

14 Q. So you agree that somebody could not  
15 re-create what you were doing in your mind with  
16 respect to these 897 companies, right?

17 A. I think anyone could -- particularly an  
18 expert in this space, could have gone through those  
19 1136 companies and determined whether they were  
20 digital music companies or not, applying the same  
21 criteria.

22 Q. Same 897 companies, would have been  
23 exactly the same as what you were doing in your  
24 head, that's your position?

25 A. I -- I don't know if it will be -- if it

1 would be, but someone could have done the same  
2 analysis.

3 Q. On direct, you also said that you  
4 researched publicly-available information to make  
5 your determinations about what -- which of the --  
6 about the 897 companies you excluded.

7 You didn't produce any of that supposed  
8 publicly-available information as part of your  
9 report, right?

10 A. No, I did not.

11 Q. We don't know what you considered,  
12 correct?

13 A. I searched public articles in the  
14 Internet and looked at publicly-available  
15 information. I even went to the --

16 Q. You can't answer that any more than  
17 generally --

18 JUDGE STRICKLER: I think he was still  
19 answering the question.

20 MR. CHARRON: Oh, I'm sorry.

21 THE WITNESS: Yeah, I also went to the  
22 companies themselves to determine what business they  
23 were in, what activities they undertook.

24 BY MR. CHARRON:

25 Q. So once you were -- excluded 837



1 companies, that left a universe of 239 companies,  
2 right?

3 A. That's right.

4 Q. And we don't know what any of those 239  
5 companies specifically were from your report,  
6 correct?

7 A. I -- I did not include them in the  
8 report.

9 Q. Of those 239 companies, according to you,  
10 PitchBook identified 65 as having non-distressed  
11 exits?

12 A. Yes.

13 Q. But you independently struck two  
14 companies from that list, Deezer and Rdio?

15 A. Yes.

16 Q. You struck Deezer because you said that  
17 company has not actually exited the market, right?

18 A. At the time, it was not clear that Deezer  
19 had. It didn't look like they had. There had been  
20 some potentially private equity investment, but I  
21 couldn't find any documentation supporting that they  
22 had exited. And I --

23 Q. So this -- I'm sorry.

24 A. Sorry. I think the private equity  
25 investment fell into a category of -- that PitchBook

1 classifies as LBO or buyout, which gets classified  
2 as a profitable exit. And so -- and also it gets  
3 qualified as a -- as an exit.

4           So I had -- I removed them because I  
5 don't -- I didn't believe, couldn't find any  
6 evidence at the time, that they had exited -- that  
7 they had actually exited.

8           Q.    So this was an instance where you didn't  
9 agree with PitchBook's result?

10          A.    It is. It is an example of that.

11          Q.    You struck Rdio from PitchBook's results  
12 because even though that company had a  
13 non-distressed exit, you do not believe Rdio "exited  
14 profitably," at least according to your research?

15          A.    Well, according to the PitchBook data,  
16 Rdio had raised, I believe, 129 million dollars and  
17 had been sold in bankruptcy for, I think, 75 million  
18 dollars. So it was -- it was not a profitable exit.  
19 It -- it was actually a distressed exit.

20          Q.    Now, of the 239 VC-backed music B2C  
21 companies that you decided not to exclude, you say  
22 PitchBook identified 37 as having distressed  
23 outcomes, right?

24          A.    Yes.

25          Q.    And that's about 15.5 percent, correct?

1 A. Yes.

2 Q. And we don't know from your report what  
3 each of these 37 companies is, correct?

4 JUDGE STRICKLER: When you say what they  
5 -- what they are, you mean their names?

6 MR. CHARRON: Correct.

7 THE WITNESS: Yes, their names are not in  
8 my report.

9 BY MR. CHARRON:

10 Q. And if I understood your direct  
11 correctly, you're now claiming that figure might  
12 drop to 26? You did some new analysis that would  
13 come up with a figure of 26?

14 A. I -- not the 37 figure, would not drop to  
15 26. The -- the --

16 Q. If you had --

17 A. Sorry, I didn't -- I don't think I  
18 answered your question.

19 Q. Well, I asked if 37 dropped to 26, and  
20 you said no.

21 A. No, that's not correct. That's not --

22 Q. The 37, you're still --

23 A. I'm not making that claim. Yes.

24 Q. You're sticking with the 37?

25 A. I am.

1           Q.    Then you've answered my question.  If you  
2   had not excluded nearly 80 percent of the 1,136  
3   companies that PitchBook had initially identified,  
4   the percentage of companies with distressed outcomes  
5   would have dropped, right?

6           A.    Are you asking a hypothetical?

7           Q.    Yes.

8           A.    That sounds correct, yes.

9           Q.    In fact, if we stuck with the same 37  
10   companies identified with distressed outcomes, the  
11   percentage would have dropped from 15.5 percent to  
12   just 3.2 percent, correct?  Hypothetically.

13          A.    I -- I went with what the data said, not  
14   the hypothetical that you're suggesting.

15          Q.    Are there any other categories, other  
16   than B2C, within PitchBook that you could have  
17   selected to try to figure out the digital music  
18   sector?

19          A.    So I did look, I did perform a number of  
20   other searches prior to this to figure out which one  
21   captured the most number of companies, which one  
22   could be as most comprehensive as possible.  There  
23   are other sectors.  For instance, you could have  
24   selected like physical retail or enterprise  
25   software, but I didn't select those because those

1 did not produce a comprehensive listing of all  
2 companies, a super set of what could be involved in  
3 digital music.

4 Q. Doesn't PitchBook have a category called  
5 entertainment software?

6 A. I believe -- I believe it's entertainment  
7 and media. And I don't believe it's software, but I  
8 can't be sure.

9 Q. But you chose not to select that  
10 category?

11 A. Well, I did experiment with a significant  
12 amount of PitchBook search criteria and found that  
13 other -- other search criteria produced a more  
14 limited result that was not complete.

15 Q. And we don't know from your report what  
16 any of this analysis you say you did was, correct?

17 A. I did not disclose that -- that part of  
18 my analysis.

19 Q. All right. In paragraph 27-A of your  
20 report, you say, and I quote, "venture investors  
21 expect to achieve a multiple return of 5 to 10 times  
22 the amount of money invested for an investment to be  
23 deemed a success."

24 Do you see that?

25 A. Yes.

1 Q. And you don't cite to any outside support  
2 for that statement; you're relying on your own  
3 experience and belief here, correct?

4 A. As a venture investor, yes.

5 Q. With that standard, you say that you  
6 believe only seven digital music companies achieved  
7 meaningful venture returns for their investors,  
8 right?

9 A. The standard I referred to is the 25  
10 million dollars of total return, profit to  
11 investors.

12 Q. So not the 5 to 10 time return?

13 A. Right, I'm using 25 million as a proxy  
14 for an investor in the early stages, in the general  
15 amount of capital that is invested in these  
16 companies, and if they were to achieve a 25 million  
17 dollar profit, that generally could result in a  
18 multiple of 5 to 10 times the amount of invested --  
19 amount of money invested.

20 Q. How many digital music companies that you  
21 looked at had a return of their initial capital plus  
22 at least one dollar?

23 A. 26.

24 Q. That's the 26 you said earlier. So then  
25 11 companies within your universe of 37 -- no?

1           A.   37 is distressed. I'm sorry, finish your  
2 question. I'm sorry. Finish your question.

3           Q.   I'm just trying -- well, never mind. I  
4 -- I think I understood it.

5                   How many -- well, strike that.

6                   You identify Pandora as one of seven  
7 companies that you say you believe achieved a  
8 meaningful venture return through an acquisition.  
9 Do you see that?

10          A.   Not through acquisition but for their  
11 investors because they went -- they went public.

12          Q.   You agree Pandora has not been acquired?

13          A.   I do. Did I say that they were acquired?

14          Q.   I believe your paragraph reads that way,  
15 but --

16                   JUDGE STRICKLER: Which paragraph?

17 BY MR. CHARRON:

18          Q.   27-A

19          A.   Last.FM, Spinner, MP3.com, Gracenote,  
20 Thumbplay, Pandora, and possibly The Echo Nest  
21 achieved meaningful venture returns for their  
22 investors, period.

23          Q.   I might have been confused by it.

24                   And in paragraph 27-B, you refer again to  
25 the 21.7 percent success rate for venture

1 capitalists in the mobile industry, right?

2 A. Yes.

3 Q. Now, here you say that success rate is  
4 based on companies achieving -- companies that  
5 achieved an exit bringing a profitable return to  
6 their investors.

7 A. Yes.

8 Q. That was -- and by that, you meant  
9 initial capital plus at least a dollar?

10 A. Yes.

11 Q. Okay. So when you say in paragraph 27-B,  
12 approximately 2,388 have achieved a successful exit  
13 for a success rate of 21.7 percent, you then say "as  
14 compared to 3 percent for digital music services."

15 Do you see that?

16 A. I do.

17 Q. So here one statistic is based on one  
18 standard of success, meaning initial capital plus at  
19 least a dollar, and the other standard is based upon  
20 your 25 million dollar return, correct?

21 A. Yes.

22 Q. And that's not apples-to-apples, as you  
23 were asked about on your direct; wouldn't you agree?

24 A. Right. That's the 26, which would  
25 compare 21.7 percent to 10 percent for digital music



1 services.

2 Q. And that would be the same  
3 non-apples-to-apples comparison for the other  
4 categories you've compared in this paragraph, right?

5 A. Sorry. So the 21.7 percent, the  
6 35 percent, and the 20.5 percent success rate of  
7 profitable returns for their investors in those  
8 three categories would compare to the 10 percent for  
9 digital music.

10 Q. Okay. Can you turn to paragraph 29 on  
11 page 14 of your report. You assert that "it would  
12 be a sign of an unhealthy market if the only  
13 remaining digital music services are those owned by  
14 larger companies content to subsidize their music  
15 subsidiaries while generating profit elsewhere in  
16 the businesses." Right?

17 A. Yes, I say that.

18 Q. The term "unhealthy market" is your term,  
19 right?

20 A. Yes, it is.

21 Q. You didn't define that term or offer any  
22 scholarship that supplied such a term with any  
23 precise meaning, correct?

24 A. I'm using my own set of professional  
25 experience to make that decision.

1 Q. Are you familiar with the term "economic  
2 profit"?

3 A. I've heard that term.

4 Q. An economic profit reflects that a  
5 company is utilizing its resources overall in a  
6 profitable way, correct?

7 A. I don't know the exact definition.

8 Q. Would you agree that a company might have  
9 a line of business that itself suffers an accounting  
10 loss but that company may overall enjoy an economic  
11 profit?

12 A. In that sentence, what do you mean by an  
13 "accounting loss"?

14 Q. GAAP. GAAP loss.

15 A. Okay. So now would you repeat the  
16 question?

17 Q. Do you agree that a company might have a  
18 line of business that itself suffers an accounting  
19 loss, but -- but the company may overall enjoy an  
20 economic profit in a market?

21 A. That's -- that could be true. It may be  
22 true. It's not the way venture capitalists look at  
23 success or failure.

24 Q. Do you have an opinion about whether  
25 Apple enjoys an economic profit in the digital music

1 market?

2 A. I don't have specific information on  
3 Apple to make that determination.

4 Q. Same question for Amazon.

5 A. I don't have any specific information.

6 Q. Same for Google?

7 A. I don't have any specific information.

8 Q. And you're not aware of any of those  
9 companies considering exiting the digital music  
10 market, right?

11 A. No.

12 Q. And that is so even though none of them  
13 may be enjoying accounting profits for those lines  
14 of business, correct?

15 A. The answer is still no.

16 Q. In fact, Apple continues to invest  
17 heavily in the digital music market, purchased Beats  
18 for 3 billion dollars, as we talked about earlier,  
19 correct?

20 A. The purchase of Beats is not an  
21 indication of Apple investing heavily in the digital  
22 music market.

23 Q. In paragraph 28 of your report, sticking  
24 on page 14, you say that Pandora has not been  
25 profitable on a GAAP basis, right?

1           A.    Yeah, I understand Pandora has never been  
2   profitable on an annual basis, according to GAAP.  
3   And I believe they were -- I think they were  
4   profitable for one-quarter or maybe two in their  
5   existence of a public company, as a public company.

6           Q.    Pandora wasn't in the interactive --  
7   interactive streaming business until last week,  
8   though, right?

9           A.    They've been a digital music company  
10   since the day they started.

11          Q.    Why should we be looking at Pandora's  
12   GAAP profits rather than at Pandora's economic  
13   profits, according to you?

14          A.    This entire report is based on a  
15   determination of profits, whether revenues minus  
16   costs produces profitable cash flows such that no  
17   additional investment is required. So my evaluation  
18   of -- of Pandora in this respect is consistent with  
19   that.

20                JUDGE STRICKLER: But earlier in your  
21   direct, didn't you say that venture capitalists have  
22   a longer time horizon measured like eight or ten  
23   years or so?

24                THE WITNESS: That's right.

25                JUDGE STRICKLER: Doesn't that suggest

1 that venture capitalists are not interested in  
2 year-to-year GAAP profits but are, in fact, looking  
3 at economic profits, which is the -- as counsel laid  
4 the definition out, an efficient use of -- of inputs  
5 over a longer term to -- to create ultimately a  
6 positive cash flow?

7 THE WITNESS: So I understand the  
8 question. Venture capitalists have to believe that  
9 a company -- that the investment will produce an  
10 increase of value. The company will create more  
11 enterprise value. And you also have to believe  
12 that, at some point, they will no longer need  
13 additional investment capital. That is, they will  
14 be self-sustaining.

15 Now, I think we're using some  
16 intermediary terms to get to that main point, but  
17 that is the point. That's the lens through which we  
18 as venture capitalists think. Are they building  
19 enterprise value and will they reach a point where  
20 they no longer consume outside capital to survive?

21 JUDGE STRICKLER: So is it fair to say  
22 that GAAP profits or losses from year to year are --  
23 constitute some evidence of whether that progress is  
24 being made but it is not the standard alone that a  
25 venture capitalist looks at?

1 THE WITNESS: Yes. Venture capitalists  
2 are investing almost exclusively in private  
3 companies which have not undertaken strict -- the  
4 use of strict GAAP definitions. So your use of that  
5 term in the question is throwing me a bit because we  
6 do look at profit and loss statements on a monthly  
7 or quarterly basis, and we're looking at the --  
8 whether the -- how much cash the business is  
9 burning. How much of its cash reserves is it using.

10 JUDGE STRICKLER: Thank you for that  
11 clarification. So let me drop the GAAP  
12 characterization --

13 THE WITNESS: Okay.

14 JUDGE STRICKLER: -- and just distinguish  
15 between accounting profits and losses and economic  
16 profits or losses.

17 So is it fair to say, then, that as a  
18 venture capitalist, you look at economic profit over  
19 the long term, and accounting profit from year to  
20 year is evidence of whether or not progress is being  
21 made towards that long-term economic profit?

22 THE WITNESS: I think that's close. I  
23 would just substitute -- we don't -- at least at  
24 Venrock, we don't discuss the terminology of  
25 economic profit. We discuss enterprise value. Is

1 the company building value? And -- and how much  
2 cash is it consuming on an ongoing basis in order to  
3 build that value?

4 I believe the concepts are similar. So I  
5 think I'm generally agreeing with your -- with your  
6 notion, but the -- one way that we look at the  
7 health of the business is how much cash are they  
8 consuming versus how much value are they building,  
9 and are they likely to reach a point when they no  
10 longer need more cash from us?

11 JUDGE STRICKLER: So does that mean  
12 you're looking at long term where eventually there  
13 are free cash flows? That's the measure that you're  
14 looking for?

15 THE WITNESS: I think there are multiple  
16 ways to get to what is enterprise value. Some  
17 public market investors, particularly, would use  
18 free cash flow as a mechanism for determining  
19 enterprise value, but in early stages of venture  
20 investing and for private companies, usually no.  
21 Usually, the enterprise value is on some other  
22 multiple, a multiple of revenues, a multiple of  
23 profits, the -- is there a potential strategic value  
24 to an acquirer.

25 JUDGE STRICKLER: Thank you.

1 BY MR. CHARRON:

2 Q. So you did not conduct any analysis to  
3 determine if Spotify enjoys an economic profit,  
4 correct?

5 A. I did not.

6 Q. And Spotify is a standalone digital music  
7 provider, correct?

8 A. Yes, it is.

9 Q. Would you turn to Exhibit H-2678.

10 A. I'm there.

11 Q. This article notes that Spotify has yet  
12 to show a profit even as it spends to grow. That's  
13 consistent with your understanding as well, correct?

14 A. Yes, it is.

15 MR. CHARRON: Your Honors, I move for  
16 admission of H-2678.

17 MR. STEINTHAL: Same comment as  
18 previously.

19 JUDGE BARNETT: 2678 is admitted.

20 (Copyright Owners Exhibit Number 2678 was  
21 marked and received into evidence.)

22 BY MR. CHARRON:

23 Q. The article goes on to quote a venture  
24 capital backer of Spotify known as Northzone. Do  
25 you know Northzone?



1 A. I don't.

2 Q. Northzone was quoted as saying, despite  
3 Spotify's lack of accounting profit, Spotify is  
4 focusing on "growth, growth, growth." Do you see  
5 that?

6 A. I do see that, yeah.

7 Q. So at least this venture capitalist  
8 believes it's economically rational to continue to  
9 grow Spotify, despite its current lack of accounting  
10 profits. Wouldn't you agree?

11 A. Yeah, he seems to say that.

12 Q. This article continues by saying that  
13 Spotify's 8 billion dollar valuation "would be  
14 Europe's biggest tech listing since the market  
15 launch of German eCommerce investor Rocket Internet  
16 in 2014." Do you see that?

17 A. I see that.

18 Q. Does Spotify's ongoing subscriber growth  
19 and high valuation reflect an unhealthy market, in  
20 your opinion?

21 A. In order to determine whether a market is  
22 healthy or unhealthy, you'd have to look at the --  
23 what's happening across all participants. Spotify  
24 is one participant. Their -- their growth is an  
25 indicator that there's more demand. The fact that

1 they are not profitable and never have been  
2 profitable is an indication that there's trouble in  
3 the market, and so much as this is, I believe, the  
4 largest provider of -- has the largest number of  
5 subscribers in interactive music streaming,  
6 something like 50 million, and has been around since  
7 2006 and yet is still unable to achieve  
8 profitability.

9 Another indication that Spotify --  
10 Spotify's current state is not -- may not indicate a  
11 healthy market is the terms of their last financing,  
12 which were severe, and surely Spotify would have  
13 been happy to take a financing on less onerous  
14 terms. And the fact that their IPO keeps getting  
15 put off, I think, indicates that the company is not  
16 in the best financial situation.

17 The last point I'd make about this  
18 article is this so-called valuation of 8 billion  
19 dollars and the idea that that would be Europe's  
20 largest listing seems to presume that Spotify, A,  
21 will go public and, B, will go public at a valuation  
22 of 8 billion dollars, neither of which we know to be  
23 true today.

24 JUDGE STRICKLER: You say that the  
25 financing that Spotify has received is -- has some

1 severe restrictions --

2 THE WITNESS: Terms.

3 JUDGE STRICKLER: -- as it relates to  
4 convertibility of debt into equity. Severe terms.  
5 Are they severe -- when you say they're severe, are  
6 they severe relative to what venture capitalists  
7 usually want with regard to -- to technology  
8 companies when they make their investments?

9 THE WITNESS: I think you asked are they  
10 more severe than the terms under which venture  
11 capitalists invest?

12 JUDGE STRICKLER: That's what I meant in  
13 the question.

14 THE WITNESS: Yes, they are considerably  
15 more severe.

16 JUDGE STRICKLER: Thank you.

17 BY MR. CHARRON:

18 Q. Is there anything wrong, in your opinion,  
19 with a business operating at low margins?

20 A. It's just harder to become profitable.

21 Q. Can such a business grow and be  
22 successful?

23 A. Some can. It's harder for sure, and I  
24 think the failure rates are higher among lower  
25 margin business than among higher margin business.

1 Also, lower margin business tends to get lower  
2 multiples on -- at exit. And so venture capitalists  
3 are usually looking for the greatest multiple, the  
4 highest amount at exit. And so we prefer higher  
5 margin businesses for that reason.

6 Q. Do you know what the margins are for  
7 Amazon's business?

8 A. All of Amazon?

9 Q. Yes.

10 A. I don't know currently.

11 JUDGE STRICKLER: Do venture capitalists  
12 -- I'm sorry -- typically seek in technology  
13 businesses higher -- what debt financing do they  
14 seek? Do they require higher interest rates than  
15 institutional investors?

16 THE WITNESS: For the most part, almost  
17 universally, venture capitalists don't offer debt.  
18 They offer, for the most part, equity financing,  
19 which don't have interest rates associated with  
20 them. Sometimes there is a -- there is a term --  
21 I'm speaking very generally here. Sometimes there  
22 is a term in the very early stages of a company  
23 where they will offer a convertible note. It's  
24 intended to be an equity financing.

25 And so it will convert into equity,

1 provided the company can raise more money in the  
2 future. But in the event that the company can't,  
3 they ostensibly treat it as a loan with an interest  
4 rate. It's -- it's not uncommon, but what would  
5 certainly be uncommon is to ever pay that loan --  
6 that loan back. Almost universally the expectation  
7 is that it will convert into equity. So for the  
8 most part, venture capitals are not debt providers.

9 JUDGE STRICKLER: Is there an implicit  
10 interest rate, though, even after it converts?

11 THE WITNESS: No, after it converts, it's  
12 -- it does not get paid back in any -- well,  
13 generally, again, because terms can vary, after it  
14 converts, its equity and the -- the expectation is  
15 not that you're going to pay back the capital, like  
16 you would a loan, but that we as venture capitalists  
17 will receive our liquidity at the time of the  
18 company's liquidity, either on an M&A outcome or an  
19 IPO.

20 JUDGE STRICKLER: Thank you.

21 BY MR. CHARRON:

22 Q. Could you turn to paragraph 38 of your  
23 report. At the very top of page 19 within that  
24 paragraph, you say, "The current system also stifles  
25 the return to Copyright Owners by limiting the

1 distribution of music."

2 Do you see that?

3 A. Yes.

4 Q. You haven't offered any evidence the  
5 availability of digital music streaming is  
6 shrinking, have you?

7 A. I do believe that by having fewer  
8 providers that that stifles the return to copyright  
9 owners because it limits the number of distributors  
10 of music.

11 Q. Right, but that wasn't my question. My  
12 question was you haven't offered any evidence that  
13 the availability of digital music streaming itself  
14 is shrinking, right?

15 A. No.

16 MR. CHARRON: I have no further  
17 questions. Thank you.

18 JUDGE BARNETT: Mr. Steinthal?

19 MR. STEINTHAL: Just one or two of the  
20 same subject.

21 REDIRECT EXAMINATION

22 BY MR. STEINTHAL:

23 Q. Do you recall being asked some questions  
24 about what you inquired was -- and asked whether it  
25 was a hypothetical concerning the numbers associated

1 with 37 distressed exits out of 239 digital music  
2 companies?

3 A. Yes.

4 Q. Okay. Let me ask you, the -- the  
5 hypothetical you were asked was if there were 37  
6 distressed exits and you applied that number to the  
7 1136 companies that you initially examined before  
8 reducing the universe to 239 digital music  
9 companies, you agreed with the proposition that 37  
10 out of 1136 is a lower percentage than 37 out of  
11 239, correct?

12 A. Yes.

13 Q. If you were trying to determine what the  
14 percentage of distressed exits of the 1136 companies  
15 were, would you need to know how many distressed  
16 exits occurred of the 897 companies you excluded?

17 A. No.

18 Q. In order to do the apples-to-apples  
19 comparison of --

20 A. Oh, if I was to compare the 1139, yes, I  
21 would have had to do a search of all 1139 and look  
22 at the distressed exits.

23 Q. Okay. And if -- if you were looking at,  
24 again, the success rates and failure rates of a  
25 universe of companies that was smaller than the

1 initial sectors that you looked at when you were  
2 asked whether if you had applied a screen you might  
3 have lowered the number, it's true, is it not, that  
4 by using the success and -- the number of distressed  
5 exits and successful exits against a smaller unit  
6 post-screen, by definition, you would have a higher  
7 number, right?

8 A. Yes.

9 Q. But if you wanted to get at the actual  
10 success rate and actual failure rate, you would have  
11 to look at all those companies that were excluded in  
12 the hypothetical to determine whether they had  
13 distressed sales or successful exits?

14 A. Yes, that's right. Yes, that's right.

15 MR. STEINTHAL: I have nothing further.

16 MR. CHARRON: Nothing further.

17 JUDGE BARNETT: Thank you, Mr. Pakman,  
18 you may be excused.

19 THE WITNESS: Thank you very much, Your  
20 Honors.

21 MS. MAZZELLO: Your Honor, Apple will be  
22 calling David Dorn next. He's the next live  
23 witness. Before that, we wanted to put in the  
24 testimony of Rob Wheeler, iTunes controller. He's  
25 one of the witnesses who will not be appearing live,



1 pursuant to the agreement with the Copyright Owners.

2 JUDGE BARNETT: Okay. Thank you. And do  
3 we have an exhibit number? Has it been marked?

4 MS. MAZZELLO: We do. So we're putting  
5 in -- the binder is coming up to you now -- his  
6 direct testimony, which is Exhibit 1613R, his  
7 rebuttal testimony, which is 1614R, and also two  
8 documents that were attached to his written direct  
9 testimony. That's document -- Exhibits 775 and  
10 1437R.

11 MR. SCIBILIA: Your Honor, good morning,  
12 Your Honor. We do not object to the introduction of  
13 the statements. We object to the introduction of  
14 one of the exhibits, which is Apple Exhibit 775.  
15 And this is a P&L spreadsheet showing, once again,  
16 cost allocations made by Apple to both their  
17 download and their streaming business, again,  
18 without any information regarding Apple's overall  
19 revenues to which these costs are allocated and  
20 without any other evidence of the methodology used  
21 in the allocation.

22 And as I believe Your Honors have noted  
23 with respect to a similar Amazon exhibit, costs in a  
24 vacuum are irrelevant, and that's a problem with  
25 this exhibit and that's why we object to it.

1 MS. MAZZELLO: Your Honor, it sounds as  
2 though they're making an objection that this is an  
3 improper summary. They did not raise that objection  
4 when we exchanged our objection list back on March  
5 1st. I understand that any objection not raised  
6 during that exchange has been waived, except for  
7 relevancy. So they've waived this objection, and  
8 the document should be admitted on that basis.

9 Also, this is a P&L statement prepared by  
10 a controller at iTunes. This is the type of report  
11 he would prepare in the ordinary course of business.  
12 It's within the scope of his responsibilities. And  
13 it gives just specific cost and revenue information  
14 about that company.

15 If they had questions about it, they  
16 could have deposed him or they could have  
17 cross-examined him here. I believe there was a  
18 similar document with Mr. Alyeshmerni, which was  
19 admitted, and their questions went to weight rather  
20 than admissibility.

21 In terms of costs in a vacuum, this does  
22 have revenue numbers, and you can see revenues  
23 compared to costs. It also has value because you  
24 can see the iTunes download business as compared to  
25 the streaming business. We've heard arguments that

1 the download business is -- that market is drying  
2 up, and this will give the Court relevant  
3 information as to the size of the download business.

4 MR. SCIBILIA: Just in terms of the  
5 waiver issue, Your Honor, we did object on  
6 foundation grounds, which is the basis for my  
7 objection today.

8 And also, you know, the notion that we  
9 didn't depose this witness, we had ten depositions.  
10 There are five services. We can't possibly depose  
11 everybody, and our failure to depose every  
12 witness is not a waiver of our objection.

13 MS. MAZZELLO: Your Honor, their  
14 foundation objection was specifically limited to  
15 testimony where the preferring participant may not  
16 be doing so on personal knowledge or with respect to  
17 documents unknown to the witness.

18 Mr. Wheeler testified that he personally  
19 prepared this document.

20 JUDGE BARNETT: Counsel, you said there  
21 was something, information here about iTunes as well  
22 as streaming. I can't interpret this document. Am  
23 I looking at something different?

24 MS. MAZZELLO: So in the top half of it,  
25 you have the music downloads.

1 JUDGE BARNETT: Oh, thank you.

2 MS. MAZZELLO: Which is iTunes.

3 JUDGE BARNETT: It's pretty obvious.

4 MS. MAZZELLO: No problem. And

5 Mr. Wheeler does provide some more information about  
6 the document in his testimony.

7 MR. SCIBILIA: Not the basis for the cost  
8 allocations, Your Honor.

9 JUDGE BARNETT: The objection is  
10 overruled.

11 MS. CENDALI: Your Honor, given -- it's  
12 obviously up to the Court, but given the closeness  
13 to the lunch break, I'm wondering if it would make  
14 more sense for us to start Mr. Dorn's exam after  
15 lunch.

16 JUDGE BARNETT: It would. And maybe that  
17 means we'll get to the head of the line in the  
18 cafeteria. We will be at recess until 12:55.

19 MS. CENDALI: Thank you, Your Honor.

20 JUDGE BARNETT: Before we break, those  
21 four exhibits offered by Apple with regard to  
22 Mr. Wheeler's testimony are admitted.

23 (Apple Exhibit Numbers 1437R, 1613R,  
24 1614R were marked and received into evidence.)

25 (Google Exhibit Number 775 was marked and

1 received into evidence.)

2 (Whereupon, at 11:57 a.m., a lunch recess  
3 was taken.)

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1 AFTERNOON SESSION

2 (1:05 p.m.)

3 JUDGE BARNETT: Please be seated. I have  
4 an announcement of general interest to this group.  
5 Specific interest, I presume, to you folks.

6 The Librarian has signed off on the  
7 Subpart A regulations, and they will be published in  
8 a couple of days, as proposed.

9 Ms. Cendali?

10 MS. CENDALI: Thank you, Your Honor.  
11 Apple would like to call David Dorn to the stand.

12 JUDGE BARNETT: Before you sit down,  
13 raise your right hand, please.

14 Whereupon--

15 DAVID DORN,  
16 having been first duly sworn, was examined and  
17 testified as follows:

18 JUDGE BARNETT: Please be seated.

19 MS. CENDALI: Good afternoon, Your  
20 Honors. As indicated, I am Dale Cendali of Kirkland  
21 & Ellis, and we represent Apple.

22 Before I begin, I wanted to let you know  
23 the current agreement with the Copyright Owners.  
24 Mr. Dorn will be testifying today both with regard  
25 to his written direct testimony and also with regard

1 to his rebuttal testimony.

2 JUDGE BARNETT: Thank you.

3 DIRECT EXAMINATION

4 BY MR. CENDALI:

5 Q. Would the witness please introduce  
6 himself to the Court.

7 A. Hi. I am David Dorn.

8 Q. Where do you work?

9 A. I work for Apple.

10 Q. How long have you worked at Apple?

11 A. I have been with Apple for five years. I  
12 joined in July of 2012.

13 Q. What is your current title?

14 A. I am the senior director of Apple Music.

15 Q. Could you briefly describe Apple Music?

16 A. Sure. Apple Music is the umbrella name  
17 that we use for our music ecosystem, and that music  
18 ecosystem encompasses three things. First is the  
19 iTunes Music Store, which you are probably familiar  
20 with; and second is the Apple Music subscription  
21 service, and the third component is our Beats 1  
22 broadcast service. It is a 24/7 live streaming  
23 radio broadcast.

24 Q. What are your responsibilities as senior  
25 director of Apple Music?

1           A.    So I am the day-to-day manager,  
2 worldwide, of the music business. And what that  
3 encompasses is artists and label relations, all  
4 programming, merchandising, business analytics,  
5 product development, a number of things. Those are  
6 a few of those things.

7           Q.    Mr. Dorn, as senior director of Apple  
8 Music, are you familiar with Apple's deals with  
9 music labels and publishers?

10          A.    I am.

11          Q.    Now, prior to joining Apple Music, did  
12 you have any other experience in the music industry?

13          A.    Yes. I have been in the music industry  
14 for about 35 years. Actually grew up in the music  
15 industry, so I had quite a bit of experience even  
16 before that.

17                   My father was in the music business,  
18 multi-Grammy award winning record producer, produced  
19 songs.

20          Q.    Can you give some examples?

21          A.    He produced songs you may know like  
22 "Killing Me Softly," Roberta Flack, and "First Time  
23 Ever I Saw Your Face" and many, many others. So I  
24 grew up in recording studios. I was a musician  
25 as -- when I was a lot younger as a kid, and I



1 eventually became a recording engineer and worked  
2 with many of my heroes, Keith Richards, Pete  
3 Townsend, Billy Joel, on and on. Those are just a  
4 few examples.

5 I switched it after that to working on  
6 the business side, working for an independent record  
7 company and then moving on to working for a company  
8 called Rhino, which was acquired by Warner Music  
9 Group, where I was for 20 years before being hired  
10 by Apple.

11 And I have pretty much seen every facet  
12 of the music industry, pretty much everyone that you  
13 could name and have worked across all of these  
14 businesses for many years.

15 Q. Now, did you prepare written direct  
16 testimony in this proceeding?

17 A. I did.

18 Q. Could you please turn to the tab in the  
19 binder in front of you marked Apple Trial Exhibit  
20 1611R. It should be the first one.

21 A. It is the first one. Thank you.

22 Q. Do you recognize that?

23 A. I do recognize that.

24 Q. Is it your written direct testimony?

25 A. That is my written testimony.

1 Q. Would you please look at the last page of  
2 that document and let me know if that's your  
3 signature?

4 A. That is my signature.

5 MS. CENDALI: Your Honors, I move to  
6 admit Apple Trial Exhibit 1611R into evidence.

7 MS. ARORA: No objection.

8 JUDGE BARNETT: Admitted.

9 (Apple Exhibit Number 1611R was marked  
10 and received into evidence.)

11 BY MR. CENDALI:

12 Q. I'm sorry, forgive me, Your Honor.

13 JUDGE BARNETT: No problem. Admitted.

14 BY MR. CENDALI:

15 Q. If you could turn to the next tab of the  
16 witness binder in front of you marked Apple Trial  
17 Exhibit 1612R. Do you recognize that document?

18 A. I do.

19 Q. What is it?

20 A. That is my rebuttal testimony.

21 Q. And, again, would you please turn to the  
22 last page of that document and let us know if that's  
23 your signature?

24 A. That is my signature.

25 MS. CENDALI: Your Honors, I move to

1 admit Exhibit 1612R into evidence.

2 MS. ARORA: No objection.

3 JUDGE BARNETT: Admitted.

4 (Apple Exhibit Number 1612R was marked  
5 and received into evidence.)

6 BY MR. CENDALI:

7 Q. Thank you. Now, Mr. Dorn, are the rest  
8 of the documents in your binder documents that you  
9 relied on in preparing your written testimony or  
10 that you are familiar with in your position at  
11 Apple?

12 A. Yes, they are.

13 MS. CENDALI: And, Your Honors, I am  
14 happy to report that we have discussed these  
15 exhibits with the Copyright Owners prior to this  
16 moment, and they have no objections to the  
17 admissibility of the following exhibits, which I  
18 would like to read in with the Court's permission.

19 JUDGE BARNETT: Thank you.

20 MS. CENDALI: I thus move to admit into  
21 the evidence the following documents: 776, 777,  
22 1431, 1432R, 1433R, 1434R, 1435R, 1436R, 1439, 1440,  
23 1441, 1442, 1585R, 1586R, 1587R, 1588R, 1589R,  
24 1590R, 1592, 1593, 1594, 1595, and 1596.

25 JUDGE BARNETT: Are we agreed that those

1 are agreed?

2 MS. ARORA: Yes, we are.

3 JUDGE BARNETT: Those enumerated exhibits  
4 are all admitted.

5 (Google Exhibit Numbers 776 and 777 were  
6 marked and received into evidence.)

7 (Apple Exhibit Numbers 1431, 1432R,  
8 1433R, 1434R, 1435R, 1436R, 1439, 1440, 1441, 1442,  
9 1585R, 1586R, 1587R, 1588R, 1589R, 1590R, 1592,  
10 1593, 1594, 1595, and 1596 were marked and received  
11 into evidence.)

12 MS. CENDALI: Thank you.

13 BY MR. CENDALI:

14 Q. Now, let's go back to the substance of  
15 your testimony, Mr. Dorn. I believe you said that  
16 you have been involved in the music industry for  
17 about 35 years?

18 A. That's correct.

19 Q. Have you noticed any changes in the past  
20 35 years?

21 A. Yes, I have noticed significant changes.

22 Q. Could you tell us about some?

23 A. So I'm old enough to remember when we  
24 were in the vinyl-only era, and then cassettes. We  
25 moved from that to the compact disk. From compact

1 disk we moved to downloads being the primary format.

2 And now we are in a transition phase once  
3 again with a new format that has started to build a  
4 level of maturity, which is the music subscription  
5 service, which is streaming.

6 Q. And in your experience in the music  
7 industry, have you ever dealt with piracy issues?

8 A. I have. So I have been working in the  
9 digital end of the business since about the  
10 mid-'90s, and so I lived through the Napster era and  
11 other file trading issues that affected the music  
12 industry.

13 Q. Did Apple in your view do anything to  
14 help alleviate the piracy issue?

15 A. Yeah, I think that Apple was a  
16 significant contributor to helping to solve that  
17 problem. The launch of the iTunes Music Store in  
18 2003 created a viable market for purchasing digital  
19 music and creating a digital economy for music  
20 creators, whether they were songwriters or recording  
21 artists.

22 Q. Are downloads still an important part of  
23 the iTunes business?

24 A. Yes. For Apple, the download business is  
25 still a large part of our business. It is

1 complemented now by subscription, but it is still a  
2 substantial part of our business. And we have every  
3 intention of continuing to maintain the iTunes Music  
4 Store business.

5 JUDGE STRICKLER: Question for you, sir.  
6 Good afternoon.

7 THE WITNESS: Good afternoon, Judge.

8 JUDGE STRICKLER: Thank you. When Apple  
9 introduced the iTunes store, in addition to  
10 combatting piracy, did it also cause a change  
11 whereby albums were unbundled and singles were  
12 reintroduced to the market via the downloads?

13 THE WITNESS: That was something that  
14 happened. And that was part of the business model  
15 for Apple was that the single track purchase was  
16 really important for us. And so, yes, we had single  
17 tracks, and we offered full album downloads, but the  
18 track was unbundled from the album.

19 JUDGE STRICKLER: Thank you.

20 BY MR. CENDALI:

21 Q. So now let's focus on interactive  
22 streaming. Do you believe that interactive  
23 streaming had any impact on the music industry?

24 A. Yes. Interactive streaming has had a  
25 very large impact on the music industry. And it is

1 a business that is growing, and it is a business  
2 that we believe is the future of where music  
3 engagement from consumers is going.

4 We have seen that business growing over  
5 the last few years. And for Apple there is a reason  
6 that we have decided to enter that business with  
7 Apple Music. It is -- it is an important area of  
8 the future growth.

9 Q. Now, from an historical perspective, have  
10 royalties for vinyl, CDs, and downloads been on a  
11 per unit basis?

12 A. They have. When we look at the structure  
13 of royalties historically, it has always been at  
14 purchase level. Something is purchased, there is a  
15 royalty against that, and that royalty is paid one  
16 time. And that has -- that business has been  
17 maintained in the download era as well, not just in  
18 the physical era.

19 JUDGE STRICKLER: I have a question,  
20 counsel. And I don't know if you can answer this in  
21 an open session as opposed to restricted. But will  
22 you be having restricted sessions?

23 MS. CENDALI: We will at the end, Your  
24 Honor.

25 JUDGE STRICKLER: Let me ask the

1 question. If you can't answer it now, we will wait  
2 for the restricted session.

3 THE WITNESS: Okay.

4 JUDGE STRICKLER: But Apple has now  
5 gotten into the streaming business over the last  
6 couple of years. What changed in the -- in the  
7 market because Apple was not always in the streaming  
8 business, what changed in the market to lead Apple  
9 to conclude that it was a good business objective to  
10 enter the streaming market?

11 THE WITNESS: That's a good question. So  
12 the streaming business has been around for a number  
13 of years. And I would say consistent with many of  
14 the things that Apple does in its businesses, we are  
15 not always the first to enter a business, but we  
16 always wait to see if something is going to take  
17 hold, if there is growth and potential to build a  
18 business.

19 And I would say that that's consistent  
20 with how we looked at the streaming business. We  
21 waited until we thought the right time took place to  
22 actually enter something that we believe could build  
23 into a sustainable business model.

24 JUDGE STRICKLER: And what was happening  
25 in the market that led you to believe that it was,



1 that streaming was a sustainable business model?

2 THE WITNESS: There were a number of  
3 entrants in the market at that point who were  
4 starting to see traction. We were starting to see  
5 that with the industry. Clearly we, you know, speak  
6 with all different facets of the industry. And what  
7 we were able to see is the potential for actually  
8 building a business, and we believe building a  
9 business that we could do better, which is sort of  
10 how we always think about building a great product.

11 And we thought we could build a great  
12 product that people would be, as Steve Jobs used to  
13 say, surprised and delighted by.

14 JUDGE STRICKLER: And what market metrics  
15 were you looking at when you said it looked like you  
16 could build a better mousetrap, so to speak? Was it  
17 subscribers, listeners, profits? What were the  
18 metrics you were looking at?

19 I don't want to know the numbers, but  
20 which metrics qualitatively were there?

21 THE WITNESS: I think you look at a  
22 couple of things. The first thing is you look at  
23 whether or not there is a large enough body of  
24 consumers that are engaging with that methodology.  
25 So, in other words, streaming is just the way in

1 which somebody, you know, is able to listen to a  
2 song. It doesn't attach any kind of financial to  
3 it. You are -- it is more the distribution method.

4               So we saw that there was a large number  
5 of people who were streaming music. And, second, we  
6 started to see businesses that were building, that  
7 were creating services where they were offering for  
8 a price a premium value, meaning, you know, a  
9 subscription price, they were starting to gain some  
10 traction as well.

11              JUDGE STRICKLER: What time frame are we  
12 talking about here?

13              THE WITNESS: Well, we launched our  
14 service in 2012. And so I don't know the exact date  
15 that the powers that be, who decided that, you know,  
16 that path forward, made that decision, but I can  
17 tell you that I was working on it clearly before  
18 June of 2012 when we launched the service.

19              JUDGE STRICKLER: Approximately how long  
20 before that, approximately?

21              THE WITNESS: Yeah, approximately year,  
22 year and a half before is when I was starting to  
23 actively become involved in those discussions to  
24 create a music subscription service.

25              JUDGE STRICKLER: So in the period

1 roughly 2010 to 2011?

2 THE WITNESS: I would say 2011 from what  
3 I can remember. Sometime in 2011 is when we started  
4 actively to have conversations.

5 MS. CENDALI: Your Honor, just to jump in  
6 a minute to refresh the witness' recollection, I  
7 believe, didn't you start at Apple in 2012? Didn't  
8 Apple Music --

9 THE WITNESS: I'm sorry, I am giving the  
10 wrong years. Apologies. Thank you for that.

11 Yes. No, 2015 is when we launched. 2014  
12 would be the time when we would have had those  
13 conversations.

14 JUDGE STRICKLER: Okay.

15 THE WITNESS: I was still -- I was not  
16 with Apple until 2012.

17 JUDGE STRICKLER: And you said you saw  
18 other companies gaining traction and that's what  
19 made you think you could get in and produce a better  
20 product.

21 Which other companies were you referring  
22 to?

23 THE WITNESS: Well, again, I'm not sure  
24 who it is that they were looking at because I was  
25 not involved in those discussions at the time, but

1 there are a number of companies who have been in  
2 this business for, you know, a number of years now.

3 And I can tell you who those companies  
4 are who have been in this business. Whether those  
5 were the impetus for Apple to get involved in the  
6 business, I don't know.

7 JUDGE STRICKLER: That's fine. Thank you  
8 very much.

9 THE WITNESS: Yeah.

10 BY MR. CENDALI:

11 Q. So focusing, again, following up on some  
12 of Judge Strickler's questions about the changing  
13 market or the market for interactive streaming, do  
14 you have a view as to whether interactive streaming  
15 became more popular from 2008 to when Apple decided  
16 to enter the streaming business in 2015?

17 A. Yeah. I think if we were to go back  
18 about ten years when you started seeing streaming  
19 become a methodology for consuming music, there was  
20 a great deal of uncertainty of whether or not you  
21 could build a business model around this.

22 And so between 2008 and when Apple  
23 entered the market, there was -- there was growth,  
24 but I would say that in the last two years, we have  
25 seen sort of that hockey stick growth, a significant

1 amount of growth in this sector. And we're  
2 continuing to see that build.

3 And so we believe that this is a future  
4 business model that is very sustainable and that it  
5 will continue to grow over time.

6 Q. Would you say -- do you have a view as to  
7 whether the interactive streaming market has become  
8 mature or is it still fringe or what's your view on  
9 that?

10 A. I would say that it is a mature market  
11 and not at its complete maturity but it is  
12 definitely a market where we are seeing millions of  
13 people who are paying for music subscription  
14 services. And when I say there is still room for  
15 maturity, there is a lot more room for growth.

16 JUDGE STRICKLER: When you say the market  
17 is mature, do you relate maturity of the market to  
18 whether or not the market is profitable?

19 THE WITNESS: I don't know the answer to  
20 that question. I don't know if I would say that it  
21 is profitable or not. I don't know.

22 JUDGE STRICKLER: I appreciate that.  
23 Your phrase you used was "mature market," do you  
24 relate maturity -- do you think the market can be  
25 mature, even if it is not -- even if the

1 participants are not realizing a profit?

2 THE WITNESS: I think that there is a  
3 possibility that you could have a mature market  
4 where there is not necessarily profitability for all  
5 but, again, I don't know if your question is would  
6 profitability have to exist for all participants or  
7 are there ones who could be in the marketplace who  
8 are not profitable while others are?

9 And so I'm not sure I understand the  
10 specific nature of the question.

11 JUDGE STRICKLER: That's a fair point.  
12 Do you understand that a mature market has to have  
13 at least one profitable entity in it for it to be  
14 considered a mature market?

15 THE WITNESS: I don't know that as a  
16 definition. I'll take your word for it, if you are  
17 telling me that.

18 JUDGE STRICKLER: I am not representing  
19 anything. I think you used the phrase "mature  
20 market." I wanted to figure out what you meant by  
21 it.

22 In your understanding of what a mature  
23 market is, does it require at least one of the  
24 streaming services to be profitable?

25 THE WITNESS: I don't know that. I think

1 that the definition I would give for a mature market  
2 is that there is actually a business model that has  
3 taken hold, that there are people participating in  
4 that, within that business model. And that it is  
5 growing.

6           And so I believe it has reached a point  
7 where there are enough people who are streaming now  
8 and it is enough -- it has risen to a level of  
9 importance in the music industry collectively,  
10 meaning those who are participating on the  
11 publishing side, on the master recording side, the  
12 artistic side, whether they are artists or managers,  
13 where streaming is as much a part of the  
14 conversation now when we speak with those  
15 participants, as the download business is. And so I  
16 would say that that is a level of maturity where it  
17 is an equal part of the conversation.

18           JUDGE STRICKLER: Thank you.

19 BY MR. CENDALI:

20           Q. So let's talk some more about Apple  
21 Music. Could you generally describe some of the  
22 investments that Apple has made to create Apple  
23 Music?

24           A. Yes. So there is obviously a lot that  
25 goes into making a service that is software-based.

1 It is not just the licenses. That is a component  
2 part.

3 But there is a great deal more that goes  
4 into the investment. There are obviously costs for  
5 design, for software engineering, marketing, the  
6 product development of how it integrates across all  
7 of Apple's ecosystem and different device support,  
8 so there is quite a bit that goes into it that sits  
9 behind the scenes that is in many cases not very  
10 sexy, unless, of course, you work at Apple and you  
11 find it to be very sexy. But there is a lot more  
12 that goes into it than just the acquisition of the  
13 content through licensing means.

14 Q. Now, is Apple Music a subscription  
15 service?

16 A. Yes. Most people that know the name of  
17 Apple Music refer to that as our music subscription  
18 service. Of course, as I said before, we think of  
19 it as an umbrella of all our music but, yes, it is a  
20 music subscription service.

21 Q. Can you describe the different tiers of  
22 subscriptions that Apple offers?

23 A. Sure. We offer three different tiers.  
24 There is an individual tier. That's a single person  
25 who signs up for a plan, which is \$9.99 a month. We



1 have a family plan, which is for families of up to  
2 six people, who can access their individual accounts  
3 with six simultaneous streams, as \$14.99 per month  
4 subscription. And we also offer a student program,  
5 a student discount program that is a \$4.99 a month  
6 plan for anyone who is attending a university or  
7 college.

8 JUDGE STRICKLER: Why do you have  
9 different price plans as you just described?

10 THE WITNESS: So we see different  
11 opportunities in the market where the individual  
12 plan is concerned, that's pretty much a standard  
13 plan and we found that that's a price point that has  
14 resonated well with single consumers who are signing  
15 up for other services, and we believe that that's  
16 the right price point.

17 The family plan we offer because we feel  
18 like there is a great deal of opportunity with  
19 parents to be able to sign up with their children  
20 who are big users of music services and are heavy  
21 streamers, when we look at consumption, but in many  
22 cases those younger members of the family don't have  
23 a credit card, don't have a payment method, are not  
24 really in a position to afford a plan that is a  
25 \$9.99 per month, and so we see that as a great

1 opportunity for families to participate together.

2                   And then for students, it is really more  
3 of a value proposition because someone who is going  
4 to school is quite often not working and still loves  
5 music. It is a great opportunity for us to  
6 communicate and to be in business with people who  
7 are heavy music, you know, users, and lovers and so  
8 we have offered that program at a more affordable  
9 value.

10                   JUDGE STRICKLER: So the family discount  
11 plan and the student discount plan exist with the  
12 discounts because the ability to pay of some of the  
13 people who will be users within those plans is lower  
14 than those who might subscribe to the individual  
15 plan?

16                   THE WITNESS: Yeah. I think it allows us  
17 to get more people into the ecosystem to be  
18 participants of the subscription service, and we  
19 believe creates, you know, a long-term value  
20 proposition for those who are on the family plan to  
21 hopefully one day convert into being individuals, as  
22 they grow up.

23                   JUDGE STRICKLER: So it is not just that  
24 the individuals in the family plan don't have credit  
25 cards, as you say, and that ability to pay but you

1 are also looking at it sort of -- not to coin a  
2 phrase -- a funnel by which you can introduce these  
3 people into becoming full-time subscribers at \$9.99  
4 a month?

5 THE WITNESS: No different than the  
6 student subscription. A student will go to school  
7 for four years, and for that four years, they are a  
8 part of the student discount program. Once they  
9 leave the university, we certainly hope to keep them  
10 in that ecosystem, but that would change to a  
11 individual program, an individual plan.

12 JUDGE STRICKLER: Thank you.

13 BY MR. CENDALI:

14 Q. Mr. Dorn, has Apple Music been  
15 successful?

16 A. I think Apple Music has been very  
17 successful. We launched again in June of 2015 with  
18 zero subscribers. And the last number that Apple  
19 released, which was in December of 2016, a few  
20 months ago, we have now exceeded 20 million  
21 subscribers paid in the service. And so I look at  
22 that as a benchmark of success.

23 Q. Now, Mr. Dorn, have you prepared some  
24 demonstratives to use in connection with your live  
25 testimony today?

1           A.    I have.

2           Q.    I'd like to turn your attention to Apple  
3 Demonstrative 1. Could you tell the Court what  
4 we're looking at here?

5           A.    So what you are looking at here is the  
6 product user interface, UI as we refer to it. When  
7 you open up the app, which is the music app on an  
8 iOS device or an Android device, we are also  
9 available on the Android platform, and this is the  
10 phone version of the service. As I mentioned  
11 earlier, we're on several platforms that Apple  
12 supports.

13                   But what you see here is the navigation  
14 points that are at the bottom of the application;  
15 the library being where you store your music and  
16 where you add music from the service. "For you" is  
17 the personalized section. This is where we  
18 recommend music for our subscribers. "Browse" is  
19 where our editors are putting music together and  
20 merchandising that for our consumers.

21                   "Radio," we have a substantial radio  
22 offering. Our Beats 1 service, which I mentioned  
23 earlier, plus about 130 additional radio stations.  
24 And then "search" is, I think, identifiable. It is  
25 where you would look for music throughout the corpus

1 of the song content that we offer.

2 Q. Could an Apple Music subscriber toggle  
3 back and forth between these screens?

4 A. Yes.

5 Q. To what extent does Apple care about its  
6 user interface?

7 A. I think that it is safe to say that Apple  
8 cares very much about the user interface. This is  
9 an area where we spend a great deal of time on  
10 design and on simplicity. And that is something  
11 that I think is across Apple's business.

12 JUDGE STRICKLER: I see you mentioned the  
13 Beats radio service is on the user interface, right?

14 THE WITNESS: Um-hum.

15 JUDGE STRICKLER: I don't know if you  
16 said it already, so I apologize if I am asking you  
17 to repeat yourself, but is there a subscription  
18 price for Beats radio separate and apart from Apple  
19 Music?

20 THE WITNESS: No. Beats 1, which is the  
21 name of that service, Beats 1 is a free aspect of  
22 the service, similar to terrestrial radio where  
23 there is, you know, the ability for anyone to  
24 listen, you know, free in front of the pay wall.

25 We use that as an opportunity and a

1 gateway to bring people behind the pay wall. And it  
2 is a fantastic service that offers all kinds of  
3 programming, but those programs are available only  
4 on-demand behind the pay wall.

5               So you can listen in linear stream form,  
6 but once something has played in its linear form,  
7 let's say last Thursday, if you wanted to listen to  
8 that special program again, you would have to be a  
9 subscriber behind the pay wall.

10               JUDGE STRICKLER: You can't -- no play  
11 back features, pure radio?

12               THE WITNESS: No, it functions exactly  
13 like a terrestrial radio station or a streaming  
14 Internet radio station that is live in realtime.

15               JUDGE BARNETT: Ad-supported?

16               THE WITNESS: It is not ad-supported.  
17 Apple Music is a non-ad-supported service.

18 BY MR. CENDALI:

19               Q. Okay.

20               JUDGE STRICKLER: I'm sorry. So there is  
21 no ads and no subscription?

22               THE WITNESS: For Beats 1?

23               JUDGE STRICKLER: For Beats 1.

24               THE WITNESS: No, no ads, no  
25 subscription. It is the free product offering that

1 we have for consumers. And it is available to  
2 anyone who wants to listen to it within our user  
3 interface. It is not available outside of the Apple  
4 Music ecosystem. But it is free. It is ad free.  
5 And it is available to anyone at any time.

6 JUDGE STRICKLER: So you don't have to  
7 subscribe to any of the other Apple Music  
8 subscription plans to be able to access Beats 1?

9 THE WITNESS: That's correct.

10 JUDGE STRICKLER: So there is no ad  
11 revenue, no subscription revenue, no revenue coming  
12 in attributable to Beats 1?

13 THE WITNESS: That is correct. It is a  
14 cost for us. Yeah.

15 JUDGE STRICKLER: Do you consider it a  
16 loss leader?

17 THE WITNESS: No, we don't. And I will  
18 tell you why. Because it is a content generation  
19 machine for us and it creates fantastic programming.  
20 So we don't look at it as a loss leader. We look at  
21 it as an additional element of the service that  
22 creates really great engagement.

23 And we think that Beats 1 for us to help  
24 tell stories about what it is that we're doing is a  
25 fantastic marketing tool, but we don't look at it as

1 a loss leader.

2 JUDGE STRICKLER: You look at it as a  
3 marketing tool?

4 THE WITNESS: It is a marketing tool. It  
5 is a content generation tool that builds fantastic  
6 programming that sits behind the pay wall, that  
7 brings a great deal of value to subscribers.

8 JUDGE STRICKLER: Can users of Beats 1,  
9 do they have skips available to them?

10 THE WITNESS: Not on Beats 1. There is  
11 no skips.

12 JUDGE STRICKLER: How about thumbs  
13 up/thumbs down type features, do they have that on  
14 Beats 1?

15 THE WITNESS: It doesn't really work that  
16 way. It is really more like, as I said, a  
17 terrestrial radio station where you are listening to  
18 the content programming. Once it goes behind the  
19 pay wall, then you have the ability to do the things  
20 you are saying, like adding things to libraries,  
21 liking things, adding specific songs to your  
22 collection, but in front of the pay wall it is a  
23 free service and it is more of a marketing and  
24 content generation tool.

25 JUDGE STRICKLER: And behind the pay



1 wall, it is still a Beats product?

2 THE WITNESS: Behind the pay wall it is  
3 still referred to as Beats 1. So you are listening  
4 like any -- anyone who listens to Beats 1 is  
5 listening in the same environment effectively. It  
6 is an in-front-of-the-pay-wall service.

7 It is the on-demand content, the  
8 programming that is, you know, sort of the  
9 compartmentalized programming that exists on Beats  
10 1. That is made available behind the pay wall  
11 on-demand and on a show basis.

12 JUDGE STRICKLER: Do listeners see their  
13 own stations on Beats 1 --

14 THE WITNESS: No.

15 JUDGE STRICKLER: -- or they just can  
16 access different programmed radio stations?

17 THE WITNESS: That's correct. So I will  
18 give you an example just to make this a little bit  
19 clearer. An artist who we work with who has his own  
20 program is Drake, very big hip-hop artist. So Drake  
21 does a show OVO Sound on Saturdays, it's a two-hour  
22 program, usually a two-hour program.

23 And when you listen to that in linear  
24 form on Saturday, you have to listen as everyone  
25 would at the same time.

1           After the fact, it is loaded behind the  
2 pay wall and you can listen to just that program  
3 on-demand as many times as you want. And it has the  
4 functionality that you would expect where you have  
5 the ability to scrub through and, you know, to be  
6 able to add certain songs to your library, but not  
7 when it is sitting in linear form in front of the  
8 pay wall.

9           JUDGE STRICKLER: One last question on  
10 that. When you get behind the pay wall, what is the  
11 price for Beats 1?

12           THE WITNESS: It is, for any of the shows  
13 that are available on-demand, it is all part of the  
14 subscription service.

15           JUDGE STRICKLER: So the prices you just  
16 mentioned?

17           THE WITNESS: Yes. There is no  
18 differentiation between once you are behind the pay  
19 wall, access to any content. It is all available to  
20 the subscriber base.

21           JUDGE STRICKLER: Thank you.

22           JUDGE BARNETT: Mr. Dorn, I think you  
23 said that one of the reasons Apple doesn't consider  
24 Beats 1 a loss leader is because of content  
25 generation. Is that your terminology?

1           THE WITNESS: Yeah, content creation,  
2 content generation, yes.

3           JUDGE BARNETT: Does that mean you are  
4 gathering data from the usage by listeners to Beats  
5 1? I mean, what are you generating there?

6           THE WITNESS: Oh, let me be clear about  
7 that. So what I'm talking about is programming  
8 content. There are four dozen or so individual  
9 programs, so if you think about when you listen to a  
10 radio station, there is a program hosted by  
11 somebody, and it is a two-hour program of content.  
12 That's what I'm talking about.

13           And they run the range of all different  
14 kinds of programs and genres. And they are  
15 specialty programs that we're creating.

16           JUDGE BARNETT: And how is that of  
17 benefit to Apple?

18           THE WITNESS: Well, it is a benefit to  
19 Apple because it is unique content that is exclusive  
20 to us, and they are great listening experiences. We  
21 believe that they are great experiences for  
22 consumers because we're turning them on to music  
23 that they otherwise would not know.

24           We're also hopefully reintroducing them  
25 to great music that they love, and it is a

1 satisfying listening experience. So we find that  
2 people access it because they are being entertained.

3 BY MR. CENDALI:

4 Q. And, Mr. Dorn, is the content that is  
5 created in Beats 1, if someone wanted to hear it  
6 again, they would have to subscribe and go behind  
7 the pay wall?

8 A. That's correct, yeah.

9 JUDGE BARNETT: Thank you.

10 BY MR. CENDALI:

11 Q. So let's talk a little bit more about  
12 Apple Music and what it offers. Let me call your  
13 attention to Apple Demonstrative 2.

14 Does this demonstrative summarize some of  
15 Apple Music's features?

16 A. Yes, it does.

17 Q. Well, turning to the first bullet, could  
18 you explain what features Apple Music has relating  
19 to its unified music platform?

20 A. So when we talk about complete access, it  
21 is access to all of the music you purchased. It is  
22 also access to the music that is available in the  
23 service. And I would add the original content that  
24 we were just talking about.

25 So it is complete access to all content

1 that is in the service, regardless of whether you  
2 paid for it or it is part of the streaming part of  
3 the platform.

4 Q. And there is a bullet that says lean in  
5 and lean-back listening. What does that mean?

6 A. Lean-in and lean-back would be simply  
7 defined as someone actively looking for specific  
8 music or is seeking out specific containers like a  
9 playlist or an album or a radio station. And they  
10 are actually leaning in and they are in many cases  
11 organizing music themselves.

12 Lean-back is more like radio. It is  
13 where we're doing the programming for you. And what  
14 we find is that there are a large number of people  
15 who like to be very interactive, and there are also  
16 a large number of people who just like to be, to  
17 have programming created for them. They lean-back  
18 and they listen to it.

19 Q. And what's the bullet off-line listening  
20 referring to?

21 A. So off-line listening is important  
22 because there are a lot of times when someone does  
23 not have either a WiFi or an over-the-air mobile  
24 connection, like a 4G connection. And so we offer  
25 the ability with the subscription service to be able

1 to download the music temporarily onto the device  
2 from the subscription platform to be able to listen  
3 in times when you are on a plane, on a train, in a  
4 tunnel, at the gym, maybe somewhere where you don't  
5 have access to stream again through a WiFi or mobile  
6 connection.

7 Q. Now, turning to the next main category on  
8 the demonstrative, music curation and discovery  
9 tools, can you briefly explain what those are about?

10 A. Sure. So this is the big differentiator,  
11 we believe, for Apple. We have a sizeable editorial  
12 team, and they are actually building really great  
13 playlists where humans are putting that music  
14 together.

15 And we believe that is a very important  
16 factor is the human curation. And it leads into our  
17 personalized recommendations because those humans  
18 who are actually listening to the music and  
19 organizing that music are also suggesting music for  
20 listeners based on their taste profile, which is a  
21 rather complicated process to explain because there  
22 is a lot of software that goes into understanding  
23 how to create a taste profile and learn from someone  
24 as they listen to the music in the product.

25 But I think we do a very good job of

1 that.

2 Q. Does Apple have any concept of daily  
3 recommendations for users?

4 A. Yes. So the "for you" section of the  
5 product, which is the most accessed part of the  
6 product, is the personalized recommendation section.  
7 And, again, it is the individual listener's taste  
8 profile. We're building those recommendations and  
9 every day we're feeding you new playlists and albums  
10 and songs.

11 And we believe that that fosters  
12 engagement, which we have seen, and that it delights  
13 people. It is value to the service.

14 JUDGE STRICKLER: This may be jumping  
15 ahead just a bit, but it relates to the curation  
16 point that you have just been testifying to. Apple  
17 is proposing a per-play rate in this proceeding,  
18 correct?

19 THE WITNESS: That is correct.

20 JUDGE STRICKLER: And is one of the  
21 reasons why you are proposing a per-play rate  
22 because the value of curation that Apple creates,  
23 Apple understands that to be a value that it wants  
24 to appropriate for itself rather than share with the  
25 Copyright Owners because curation is not created by

1 the recording -- by the songwriters, but by Apple?

2 THE WITNESS: You know, I will be honest  
3 with you, I have never thought about it that way,  
4 that the curation factor had -- I am not sure that  
5 that's why we're seeking that.

6 The way we look at curation is that it is  
7 what Apple would do to create a better experience,  
8 but I'm not sure that that's tied to the financial  
9 aspect of the way in which we would compensate  
10 rights creators. That's -- that has never occurred  
11 to me.

12 JUDGE STRICKLER: Maybe this will come up  
13 later on, so we will go off to it later.

14 THE WITNESS: Okay.

15 BY MR. CENDALI:

16 Q. When you talk about engagement, you  
17 mentioned engagement, what are you referring to when  
18 you say engagement?

19 A. So when we say engagement, just to be  
20 clear, we're talking about the actual use of the  
21 service. Our goal is not to have subscribers so  
22 that all they are doing is just paying a monthly fee  
23 and then they don't do anything, because all that  
24 does is eventually somebody wakes up and says:  
25 Well, why am I paying for this service? Right.



1           What we want is we want people who are  
2 using the music service because they are enjoying  
3 it. And engagement for us is the actual activity of  
4 listening to music. And it is always our goal to  
5 have people listening to as much music as they can,  
6 because it means they are enjoying the service.

7           Q.   Do you have a view as to whether the  
8 Apple Music features we have been discussing  
9 encourage people to listen to more music?

10          A.   We believe that they do. And it is why  
11 we invest so much time, energy, you know, and  
12 resources behind the programming of music, the  
13 individual curation of music, the editorial human  
14 factor, the way in which we think about  
15 merchandising and designing the product, all of  
16 those things, I think, go hand in hand with creating  
17 a more vibrant product and a more vibrant ecosystem  
18 of engagement with consumers.

19          Q.   Do you have a view as to whether  
20 encouraging people to listen to more music is good  
21 for songwriters and publishers?

22          A.   Well, I think any time we can get more  
23 people to listen to more music, that is great for  
24 content creators; songwriters or recording artists.

25          Q.   Now, let's deal with, I don't think we

1 have discussed the last main bullet, community for  
2 music engagement -- enjoyment, excuse me --  
3 community for music enjoyment.

4 And can you tell the Court a little bit  
5 more about that?

6 A. Sure. So these are simple features, you  
7 know, to understand sharing is the ability to take a  
8 piece of music that you love and to share that with  
9 your friends or your family. It is a fairly common  
10 practice. And it is a social feature.

11 Connect is an aspect that we created that  
12 many in the industry had asked us for years about  
13 having that ability for their artists. And it is  
14 the ability for an artist to communicate with their  
15 fan base.

16 So you would follow an artist and that  
17 artist would make postings. And if you were  
18 following that artist, you would be able to see what  
19 they are posting.

20 Q. Mr. Dorn, do you have a view as to  
21 whether the features we have been discussing help  
22 distinguish Apple Music from other services?

23 A. We believe that they do. Yes. The  
24 answer, simple answer is yes.

25 Q. Do you believe that Apple Music has made

1 a contribution to the music industry?

2 A. Yes.

3 Q. Tell me why.

4 A. Well, if we start with the iTunes Music  
5 Store, we obviously built a very successful and I  
6 would use, again, the word engaging product with the  
7 sale of music downloads.

8 With the addition of streaming with Apple  
9 Music, we are seeing growth in our music business.  
10 We're seeing the economy growing for music overall.

11 And I think that that is a great thing  
12 for content creators. And I think it instills  
13 confidence in the creation community to actually do  
14 what it is that they do, write songs and record  
15 music.

16 Q. Do you have a view as to whether services  
17 like Apple Music help make music more accessible?

18 A. I believe we make music more accessible  
19 by having an additional product offer in the  
20 streaming service with Apple Music. I think we're  
21 reaching more consumers than we would if we just  
22 were to maintain the iTunes Music Store solely, so  
23 we are finding new consumers and new music fans.

24 Q. Now, are you familiar with Apple's  
25 proposal for an interactive streaming rate in this

1 proceeding?

2 A. I am.

3 Q. Let's turn to Apple Demonstrative 3. Is  
4 this a summary of the royalty that Apple is  
5 proposing for interactive streaming in this  
6 proceeding?

7 A. It is.

8 Q. Now, could you briefly describe that  
9 proposal for the record, just what its terms are?

10 A. Sure. It is a single per-play rate,  
11 0.00091 dollars per play for non-fraudulent plays  
12 that are equal to or greater than 30 seconds. And  
13 it is an all-in rate.

14 Q. Let's talk about each of these features.  
15 Let's start with the per-play rate structure.

16 Why -- is Apple proposing a per-play rate  
17 structure?

18 A. Well, I would say that the best way to  
19 describe this is that we're looking for a simple,  
20 fair, and very transparent way of paying the content  
21 owners and the songwriters. We believe that a  
22 per-play rate is the simplest way of doing that.

23 And we believe that there is a lot of  
24 confusion right now in the way in which deals are  
25 struck and the multitude of ways in which payment

1 takes place in the streaming part of the economy.

2           We have always felt like the simplest  
3 solution that is fair and transparent is the best  
4 solution.

5           Q.   Well, do you have a view as to whether  
6 Apple's per-play proposal will incentivize services  
7 or copyright creators?

8           A.   So we think that it helps to incentivize  
9 both for two different reasons. So where the  
10 creative community is concerned, again, we're  
11 talking about the songwriter community in here, but  
12 there is also the recording artist community, any  
13 time you have something that is clearly understood,  
14 that is simple and easy and is fair, it fosters a  
15 level of trust and certainly a level of  
16 understanding of how they are being paid.

17                   And as a royalty recipient myself from my  
18 father's recordings, when I look at royalty  
19 statements that are confusing, it is very hard for  
20 me to understand how I am being paid. And right now  
21 there are different ways in which music is valued.

22                   So when you look at the fact that a song  
23 stream can be, for the exact same song that streams  
24 one place and streams another has different values,  
25 I think for the creative community, that is a hard

1 thing to understand, you know, so that's why we're  
2 proposing the single per-play rate.

3 JUDGE STRICKLER: I'm sorry, do you think  
4 simple equates with fair in this context?

5 THE WITNESS: In this particular context,  
6 I do, because I think what we have done is we have  
7 structured something that -- and I know we wanted to  
8 get into a little more detail of how we did it, but  
9 I believe that it also allows the service providers  
10 to be able to invest in their services and innovate,  
11 but also it creates something that is a very fair  
12 form of compensation in our minds for the value of  
13 the music.

14 BY MR. CENDALI:

15 Q. Now, Mr. Dorn, I think you mentioned that  
16 the rates may vary right now. Could you explain  
17 what you meant when you were saying that under the  
18 -- can you address the current structure and any  
19 variation in rates, if any, under that structure?

20 A. Sure. The current structure is a  
21 percentage of revenue. And that's been around for a  
22 little while. And, you know, when those deals were  
23 entered into, that was, you know, a method that was  
24 acceptable to all, but we believe that the time is  
25 ripe now to change that because a service like Apple

1 is paying one rate, while other services that  
2 operate different models are paying -- while they  
3 may be paying a percentage, the value of the stream  
4 is not the same.

5 And so that is the problem in our minds  
6 is that a song stream, if it is listened to and  
7 enjoyed, has a consistent level of value. So that's  
8 why we believe there is a single rate per play that  
9 should be applied.

10 Q. Is part of --

11 JUDGE STRICKLER: Is Apple currently  
12 operating under direct licenses with music  
13 publishers?

14 THE WITNESS: We are.

15 JUDGE STRICKLER: And are you operating  
16 under a per-play rate?

17 THE WITNESS: No, we are operating under  
18 a percentage rate at this point.

19 JUDGE STRICKLER: A percentage of  
20 revenue?

21 THE WITNESS: Yes.

22 JUDGE STRICKLER: Go ahead, I'm sorry.

23 BY MR. CENDALI:

24 Q. And do you believe that the existing  
25 rate, statutory rate has helped cause Apple in its

1 current deals to use the percentage-of-revenue  
2 model?

3 A. Yeah. Apple is using the percentage rate  
4 right now. That is the method by which we are  
5 paying.

6 Q. And is that because that's what the  
7 current statutory rate is that has influenced that  
8 structure?

9 A. I'm sorry, can you restate that?

10 Q. Sure. Has the current rate structure  
11 percentage of revenue created -- some witnesses have  
12 said, sort of a shadow on direct deals that have led  
13 to other people adopting that.

14 A. Yes.

15 Q. Now, are you aware of any problems or  
16 complaints with the current variability of streaming  
17 rates?

18 A. Well, you know, I go back to what I said  
19 is that when you have variability in the rates and  
20 the value of the music, you foster in the minds of a  
21 number of artists and songwriters a lack of trust  
22 because of the transparency on how they are being  
23 paid.

24 And you know I can just give you two  
25 examples of artists, one would be Prince, who did



1 not make his music available for a number of years  
2 in streaming services, and, you know, and the other  
3 would be Adele, who did not make her album available  
4 about a year and a half ago, when that came out, was  
5 not available for streaming services either.

6           So those are fairly high-profile artists.  
7 And, you know, Prince was very vocal about this. I  
8 don't think that helps the community of songwriters  
9 when somebody that prominent is questioning the  
10 payment method.

11           Q. Now, how if at all have the changes in  
12 the interactive streaming market since 2008 that you  
13 were talking about earlier influenced the rate  
14 structure that Apple is proposing?

15           A. Well, you know, Apple, again, looks at  
16 this and says that much in the way that the download  
17 business flourished because it was a very simple and  
18 transparent business, we believe the time is now  
19 that we need to create the same level of simplicity  
20 and transparency.

21           And so this is why we have adopted this  
22 00091 cent 91 dollars per play.

23           JUDGE STRICKLER: When you make this  
24 analogy to Apple's download business and you say  
25 Apple's download business was simple and

1 transparent, what aspects are you referring to?

2 THE WITNESS: Well, there was a  
3 mechanical rate that was established, much in the  
4 same way that the rate was established but against  
5 the principles, the four principles that I  
6 understand. It was a very well-understood  
7 mechanical. It was easy for an artist to know when  
8 a download was sold, how much they would receive.

9 And it was something that was adopted by  
10 the industry. It is an industry or at least it was  
11 adopted and the industry agreed with that rate. And  
12 nobody actually fights that rate, you know, or at  
13 least from the general consensus among the industry,  
14 that is a standard.

15 And it is a statutory rate. And so when  
16 we think about this per-play rate, what we're  
17 thinking about is how can we help to move to a place  
18 where, in the streaming world, we have a similar  
19 sort of correlative that helps create that same  
20 level of understanding, how an artist is going to be  
21 paid.

22 BY MR. CENDALI:

23 Q. Do you have a view as to whether a  
24 per-play rate structure would incentivize  
25 songwriters?

1           A.   Well, I believe that any time you can  
2 give somebody something that is easy to understand  
3 and they believe is fair, it is an incentive. When  
4 a songwriter or a recording artist is unsure about  
5 whether they are going to be able to make money from  
6 the work that they have spent so much time and  
7 energy creating, it is a disincentive for others to  
8 enter that particular endeavor and marketplace.

9           JUDGE STRICKLER: You are talking about  
10 two things, a structure of the rate and the rate  
11 itself. You are talking about how you believe it is  
12 important for the artist to believe that it is a  
13 fair -- that both are fair.

14           Copyright Owners are also seeking a  
15 per-play rate, so it is the same structure. So to  
16 the extent you think it is fair and they think it is  
17 fair, we have got, shall we say, a meeting of the  
18 mind there but they want a much higher rate. So  
19 they are telling you that they think a fair rate is  
20 much higher.

21           THE WITNESS: That's right.

22           JUDGE STRICKLER: If fairness to the  
23 artist is what we're trying to get, why don't you  
24 just agree with their rate?

25           THE WITNESS: So that's a great question.

1 The way that we think about it is that currently the  
2 way that the structure works is that the value of a  
3 song potentially is far lower than the rate that  
4 we're proposing here.

5 The Copyright Owners are proposing a rate  
6 that is higher than this rate. And what we believe  
7 is fair is something that is sort of in the middle.

8 We believe a rate that applies -- that is  
9 very similar to the mechanical that is used in  
10 downloads and that is that it was one of the things  
11 that we used in order to arrive at this, we believe  
12 that that is a fair rate because it is a rate that  
13 balances out the interests of the current situation  
14 with what the Copyright Owners are asking for.

15 JUDGE STRICKLER: So an honest broker?

16 THE WITNESS: Well, you can say that, I  
17 guess. I feel like it is not -- we're not speaking  
18 just on behalf of Apple. We believe this is a great  
19 -- this is a great rate for the industry, of those  
20 who are participating in music streaming.

21 BY MR. CENDALI:

22 Q. Why do you think it is a good proposal  
23 for the service side of the industry, focusing still  
24 on the -- on the per-play rate structure itself?

25 A. Sure. So if we look at the problem that

1 you have on the lower end of the spectrum, the  
2 Copyright Owners clearly believe that they are not  
3 being paid enough for, you know, for that percentage  
4 base, the plays at the percentage base.

5           And then when you look at the higher end  
6 of the structure, that's a problem for the Services  
7 because the Services need to be able to generate  
8 some kind of a profit to be able to reinvest in  
9 their business or they at least need to be able to  
10 maintain their business and to innovate on top of  
11 that.

12           And a company like Apple needs to be able  
13 to run a business in order to be able to continue to  
14 do this great innovation around design and user  
15 interface and marketing and promotion and curation.  
16 These things come at a cost. And so we are looking  
17 for what we believe is a fair rate that allows both  
18 the service providers to be able to participate, as  
19 well as the artistic community be able to  
20 participate.

21           Q. Do you believe that -- well, following up  
22 on Judge Strickler's, one of his questions about  
23 fairness, do you think that -- do you have a view as  
24 to, leaving aside what the rate is, it is fair to  
25 have a simple, transparent rate that is the same for

1 every stream?

2 A. Well, yes, we do. And I think we have  
3 already seen this work historically for decades. In  
4 either the purchase of a single that was vinyl or  
5 the purchase of a download, it is simple, and it is  
6 a single per-play rate that we are proposing that we  
7 believe correlates to a methodology that has been  
8 adopted and accepted for decades.

9 Q. All right. So now let's focus on the  
10 particular rate, the .00091 per-play rate that Apple  
11 is proposing. And let's look at Apple Demonstrative  
12 4.

13 Could you tell me what this is?

14 A. Right. So when we look on the left-hand  
15 side of the screen, we're seeing the current  
16 mechanical rate for a download, which is 9.1 cents  
17 per download. On the far right side we're seeing  
18 the rate that we have just been talking about that  
19 we're proposing, .00091 dollars per stream. And in  
20 the middle is the calculation that gets us there.

21 And in that calculation we value one  
22 download to 100 streams.

23 Q. Now, let's talk about the, I guess, the  
24 first box on the left. Can you tell me about the  
25 first box on the left and why Apple is referring to

1 the download rate as part of its conversion?

2 A. Sure. So this is, again, a mechanical  
3 rate that has been set. It has been, you know  
4 agreed upon by the industry. It is something that  
5 we have been working on for a number of years and  
6 very importantly it is something that has been  
7 approved for the next five years.

8 So clearly the industry at large has no  
9 problem with this particular rate or at least there  
10 is a collective agreement that it is good enough for  
11 the next five years, so we figure it is a good  
12 starting point because it is already valued the --  
13 there is already a value at the song level when  
14 something is purchased for what the content creator  
15 is compensated.

16 Q. Let's talk about the next box then, the  
17 conversion ratio of downloads to streams of  
18 1-to-100. Could you explain to the Court Apple's  
19 basis for the conversion rate?

20 A. Sure. So Apple looked at a couple of  
21 different factors. But primarily what we were  
22 looking at is the charts. So the way in which  
23 charts work is that they value a certain number of  
24 streams to a download in order for that song to  
25 enter the chart, to be counted towards the chart for

1 when a song enters those charts.

2 And there are different charts all around  
3 the world, different charting companies around the  
4 world, but we use that metric as a starting point,  
5 combining that with what we already see here with  
6 the mechanical and the download side.

7 Q. Well, let's turn to Apple Demonstrative  
8 5. What is this?

9 A. So this is the Billboard chart.  
10 Billboard is the recognized charting body, of  
11 course, in the United States. And Billboard values  
12 one download equals 150 streams. That is an  
13 industry accepted benchmark. Billboard has been  
14 doing this for a while with the streaming business.  
15 And it is an accepted number of streams for  
16 charting.

17 Q. Could you describe or explain to the  
18 Court Billboard's role in the industry and whether  
19 you have a view as to whether people respect  
20 Billboard?

21 A. Yes. So I think it is safe to say that  
22 the charts, Billboard or others, but since we're  
23 sitting here in the United States, the charts are of  
24 extreme importance to the music industry, whether  
25 that is a songwriter or a recording artist.



1           The chart, the Billboard chart is the  
2 bible. And getting on that Billboard chart and  
3 rising to the top of the chart is the benchmark of  
4 success.

5           Q. And do other people in the industry -- do  
6 people in the industry rely on Billboard and cite to  
7 it?

8           A. They do.

9           Q. Let's look at what is in the binder as  
10 Apple Trial Exhibits 1593 through 1596, which have  
11 already been admitted in evidence. Could you tell  
12 me generally what those are?

13          A. Yes. So 1593 is a press release from  
14 Sony/ATV, one of the major publishers that is  
15 specifically addressing Drake's album, Views, which  
16 came out last year.

17                 And others are press releases from  
18 Sony/ATV, from Warner/Chappell and from Universal  
19 Music Publishing Group. And they are similar  
20 documents there, they are press releases.

21          Q. And do all of these documents show use by  
22 publishers of citing to Billboard?

23          A. Yes. I think it is obvious from looking  
24 at them that the Billboard chart is not only called  
25 out but its importance is called out.

1 Q. Let's look at Apple Demonstrative 6,  
2 which is a portion of Exhibit 1593. Can you point  
3 out, describe anything around that that you think is  
4 relevant to the extent that the Billboard is relied  
5 on by publishers?

6 A. Sure. The two things that we're  
7 highlighting here is one is it is talking about a  
8 the top the total calculation on the Billboard chart  
9 for how many equivalent albums, and equivalent  
10 albums are the number of true albums that are sold  
11 along with the track, the individual tracks that are  
12 sold from download, and the number of songs that are  
13 streamed.

14 They are all added in combination up to  
15 an equivalent album total. And, of course, what we  
16 see at the bottom is the fact that it went Number 1  
17 on the Billboard chart. That is the pinnacle. And  
18 that's what everybody is looking for.

19 Q. And this is a reference to the conversion  
20 rate?

21 A. That's right.

22 Q. Now, in addition to Billboard, did Apple  
23 look at other -- I believe you mentioned that Apple  
24 looked at other industry sources. Let's look at  
25 Apple Demonstrative 7.

1                   What is this?

2           A.    So this is the equivalent in the United  
3   Kingdom of the Billboard chart. This is the OCC or  
4   the Official Charts Company, where they are equating  
5   one download to 100 streams. That has since  
6   changed. In December, end of December of 2016, the  
7   OCC is now valuing one download as 150 streams.  
8   They are in alignment now with the Billboard chart.

9                   JUDGE STRICKLER: Do you know why the  
10  change was made?

11                  THE WITNESS: Well, I can only comment on  
12  what I have seen coming out of the news media from  
13  the U.K. I was not involved in those discussions.  
14  They said because of the volume of streams that have  
15  gone up, they felt that it was time for a  
16  reevaluation, but I was not part of that, so I don't  
17  know their reasoning.

18                  JUDGE STRICKLER: Do you know the  
19  reasoning as to how they ever came to the 1-to-100  
20  in the first place?

21                  THE WITNESS: I do not.

22                  JUDGE STRICKLER: And how about  
23  Billboard's 1-to-150, do you know the reasoning  
24  behind that that Billboard utilized?

25                  THE WITNESS: I am not part of those

1 discussions. Billboard establishes those rates and  
2 they inform the industry, but I am not part of those  
3 discussions.

4 JUDGE STRICKLER: Thank you.

5 BY MR. CENDALI:

6 Q. Mr. Dorn, just building on that, are you  
7 aware from being involved in the industry that  
8 Billboard and the official charts spent a lot of  
9 time coming up with these conversion rates?

10 A. That I am aware of. And I do speak with  
11 Billboard on a regular basis, but I am not part of  
12 their calculation.

13 Q. So now do people in the industry, such as  
14 publishers, rely on and cite to the Official Charts  
15 Company rates?

16 A. Yes, they do.

17 Q. So let's take a look at Apple's  
18 Demonstrative 8. Is that part of a blowup of  
19 Exhibit 1594?

20 A. I think this is similar to the other  
21 document. It is showing the importance of the  
22 charts and the placement on the charts in the United  
23 Kingdom.

24 JUDGE STRICKLER: I was just looking at  
25 this quickly, and I haven't read it through, but I

1 notice on the first one that we looked at,  
2 Exhibit 1593, I guess it was, it referred to album  
3 equivalents.

4 Does this one refer to album equivalents  
5 as well, Exhibit 1594?

6 THE WITNESS: I'd have to reread the  
7 entire document to see if they do. The full quote  
8 here does not.

9 JUDGE STRICKLER: Maybe counsel can call  
10 your attention to it or to its absence, as the case  
11 may be.

12 BY MR. CENDALI:

13 Q. Maybe there is another way of putting it.  
14 Can you explain what an album equivalent is as you  
15 go from streams to albums to -- well, can you  
16 explain what an album equivalent is?

17 A. Sure. So when we look at track album  
18 equivalents, that's the number of single tracks that  
19 are sold. There are ten songs sold individually  
20 equals one album. Where streaming is concerned, it  
21 is 1500 streams equals an album.

22 So if you had an album stream total  
23 number of aggregate streams, you would divide by  
24 1500 to get the equivalent number of albums that had  
25 streamed. This particular document is talking more

1 about the singles. And I believe, if I am not  
2 mistaken, because I'd have to take a look back on  
3 the date, this is probably predating Ed Sheeran's  
4 release and it was talking more about the single  
5 releases, but I don't know for sure. I'd have to  
6 read the entire document again.

7 JUDGE STRICKLER: Okay.

8 BY MR. CENDALI:

9 Q. So now what ratio is Apple proposing to  
10 use to convert the download rate to streams?

11 A. So we're looking at one download equals  
12 100 streams, which is not the same thing as what we  
13 just looked at here.

14 Q. So why did Apple choose or propose a rate  
15 of 1-to-100 as opposed to 1-to-150 or something  
16 else?

17 A. So there are two reasons. The first one  
18 is because when we look at the mechanical rate of  
19 9.1 cents, what we are trying to do is create  
20 something that we believe is equivalent in nature,  
21 that is easily understood by the community and is,  
22 again, fair.

23 So when we look at .00091, that is one  
24 download equals 100 streams. The other thing that  
25 we considered was the fact that we're trying to be

1 more favorable to the songwriting community. 150  
2 streams, it takes a little bit longer to get to to  
3 equate a download than it does 100 streams.

4 So we think that, again, back to the  
5 statement I made before, when we're trying to find a  
6 middle ground, we think that that is a fairer  
7 proposal to the content creation community.

8 JUDGE STRICKLER: Correct me if I am  
9 wrong, but you didn't get the 100-to-1 equivalents  
10 out of a whole cloth, you got it out of the official  
11 charts from the U.K.? That was your testimony,  
12 correct?

13 THE WITNESS: Directly from the OCC? I  
14 don't know that that's the only thing but, yes,  
15 that's a factor that we looked at, yeah.

16 JUDGE STRICKLER: Okay. In your  
17 testimony is there any other evidence that you rely  
18 -- that you point to to get to the 100-to-1, other  
19 than trying to be favorable to the Copyright Owners?

20 THE WITNESS: I would have to reread my  
21 testimony to know whether I stated anything beyond  
22 that. I don't actually remember. I would have to  
23 reread the testimony.

24 JUDGE STRICKLER: Okay. So if there is  
25 nothing else in there, we will go back and check, if

1 there is nothing else that got you to the 100-to-1,  
2 then it would only have been the Official Charts  
3 Company, 100-to-1 ratio; is that fair, if you have  
4 nothing else in your written direct testimony?

5 THE WITNESS: If I have nothing else in  
6 my written testimony, then I think that's a fair  
7 statement.

8 JUDGE STRICKLER: Okay. So you got it  
9 because it was in the industry. And now you told us  
10 that the industry has changed to 150-to-1. When the  
11 facts change, don't you change your mind?

12 THE WITNESS: Not always.

13 JUDGE STRICKLER: And not in this case?

14 THE WITNESS: Well, again, I think that  
15 what we're showing is we're providing a fairer rate  
16 to the songwriting community in this particular case  
17 here. We're establishing a rate that we believe,  
18 again, is better than the current rate, not quite as  
19 high as the rate that is being proposed.

20 JUDGE STRICKLER: I am a little confused.  
21 Maybe you can help me out. And I understand why you  
22 perceive the rate structure to be fairer because it  
23 is simple, but I don't understand how any particular  
24 number or maybe you can tell me, why do you think a  
25 higher rate at the 100-to-1 ratio for the Copyright



1 Owners is fairer than the 150? Why is more fairer?

2 THE WITNESS: Well, again, I am going to  
3 go back to that just because something exists today,  
4 doesn't necessarily mean that that is the way it  
5 should be going forward. So we are reevaluating  
6 what we believe to be the fair process for  
7 compensating songwriters. And the industry can say  
8 150 is for charting purposes, and we know that  
9 that's, you know, the value that has been  
10 established for charts.

11 We are not a chart. We are a service  
12 that, you know, we sell our service to a customer.  
13 So it doesn't necessarily mean we have to equate to  
14 where that chart evaluation is. We believe that the  
15 songwriters deserve a very fair level of  
16 compensation, and that's where we came up with the  
17 100.

18 It also equates to -- and this, I think,  
19 was the first point that I made -- it equates to the  
20 mechanical. And for us that's a very simple, clean,  
21 calculation.

22 JUDGE STRICKLER: You may it equates.  
23 Because doing the math dividing by 100, it is easy,  
24 you can see it with the naked eye, rather than  
25 having to do the math?

1 THE WITNESS: That's correct. So I go  
2 back to it is something that could be understood  
3 very easily. So we believe it is an easy number to  
4 understand, and it is a very fair value.

5 BY MR. CENDALI:

6 Q. Now, Mr. Dorn, Apple also has an expert  
7 who will be testifying after you that you -- and you  
8 are aware of that, correct?

9 A. Yes, I am.

10 Q. And you understand that that expert is  
11 looking at a lot of different conversion rates from  
12 different sources other than just the Official  
13 Charts Company, correct?

14 A. That's correct.

15 Q. And do you understand that that expert is  
16 also talking about academic literature that talked  
17 about a 137-to-1 conversion rate, correct?

18 A. That's correct.

19 Q. And was all that part of Apple's analysis  
20 as well in coming to the 100-to-1 proposal?

21 A. Yes.

22 MS. ARORA: Objection, Your Honor, this  
23 is outside the scope of Mr. Dorn's direct and  
24 rebuttal testimony.

25 MS. CENDALI: I am following up on His

1 Honor's testimony, and this is not outside the  
2 scope. He talked about the different rates  
3 extensively in his expert report. And I'm, to be  
4 helpful to the Court, pointing out that the expert  
5 is also going to be talking about it in more detail.

6 MS. ARORA: He has already testified as  
7 to what he had in his direct and rebuttal testimony.

8 JUDGE BARNETT: Okay. And I don't think  
9 he added anything to that, other than to say he  
10 knows that there is an expert who is coming to  
11 testify about something more. So overruled.

12 JUDGE STRICKLER: It is like previews.

13 MS. CENDALI: Previews are good, right.

14 BY MR. CENDALI:

15 Q. So, Mr. Dorn, one more question on the  
16 rate and then I want to get to some of the other  
17 elements of Apple's proposal.

18 How does Apple's proposed rate compare  
19 with the amounts that are currently being paid in  
20 the industry for interactive streaming as best you  
21 know?

22 A. Well, currently interactive streaming  
23 pays a percentage basis. And so Apple's rate is a  
24 rate that pays at obviously per play. There are a  
25 number of instances where songs are being valued at

1 different -- where a song stream is being valued  
2 differently, and so we believe that setting a single  
3 rate is the right way to go because it creates a  
4 conformity that is, again, easily understood.

5 Q. Do you have a view as to whether Services  
6 or will Services pay more or pay less or will it  
7 vary? What would be the impact?

8 A. I think there is going to be variation  
9 from the current model that exists, but in the  
10 future there is one payment method. And it is,  
11 again, applied evenly across any of the Services.  
12 And it makes it easy to model what your costs are  
13 going to be, in addition to being able to transfer  
14 that understanding to the community.

15 Q. So let's go back to Apple Demonstrative  
16 3, Apple's proposal. And let's look at the second  
17 bullet point there or category, non-fraudulent  
18 plays.

19 Could you explain to the Board what is  
20 meant by that part of Apple's proposal?

21 A. Right. So we state this specifically  
22 because there are ways to game the system. And for  
23 us, a play should be a legitimate play by somebody  
24 who is actively saying I want to listen to this song  
25 and they listen to it.

1           There are a multitude of ways to be  
2 fraudulent, but I will just call out two simple  
3 ones. One is you could hire a room full of people  
4 who would do nothing but sit and listen to one song  
5 all day long and they are able to elevate the number  
6 of streams. And we have seen that happen.

7           There are also ways to create bots, so it  
8 is software program writing, so that a song is  
9 streamed by a number of computers. Again, sitting  
10 in a room or in a server room and it just plays the  
11 same song over and over again. We don't believe  
12 that is a legitimate play, so we eliminate that from  
13 the calculus.

14           JUDGE STRICKLER: When you say you  
15 eliminate it from the calculus, do you have anything  
16 in the terms, as opposed to the rates, that would  
17 allow the fraudulent plays to be identified and  
18 excluded?

19           THE WITNESS: We do. I believe I would  
20 have to read through our terms of service, but I'm  
21 pretty sure that we do not allow that. But I would  
22 have to read through, again, for the exact language  
23 on that.

24           JUDGE FEDER: How does one identify which  
25 plays are fraudulent and who does the identifying?

1                   THE WITNESS: Yeah, it is -- it is a very  
2 complicated process, as you can imagine, to be able  
3 to determine is this a Taylor Swift fan who is a  
4 young girl who listens over and over again and that  
5 is legitimate, versus a bot that just is playing it  
6 50, you know, 57 times in one day or however many  
7 times you would listen to the song.

8                   We are generally able to tell a  
9 fraudulent play based on something that for us just  
10 seems like it is completely out of character with  
11 that listening behavior. But it is not something  
12 that is easy to do.

13                  And it is one of those things where we  
14 have software that helps us detect when we see a  
15 song is streaming over and over again from one IP  
16 address, but it is not something you can't go  
17 through the other end of the line and actually look  
18 and see who is doing that. So you have to use  
19 software to help you identify when you believe a  
20 specific song play over and over again counts as  
21 fraudulent. And we try our best to identify those  
22 opportunities.

23                  JUDGE FEDER: From the songwriter's  
24 perspective, would you say that introduces an  
25 element of non-transparency? Because the songwriter

1 doesn't really have much visibility into how you,  
2 Apple, determine whether a play is legitimate or  
3 fraudulent.

4 THE WITNESS: A good question. I don't  
5 believe that there is a level of transparency from  
6 the content creator's standpoint to where they are  
7 able to look at those plays specifically and say in  
8 reporting, you know, these are legit or these are  
9 fraudulent.

10 This is Apple, you know, basically taking  
11 the position where we don't believe that fraudulent  
12 plays are how we would like to run our service or to  
13 compensate rightsholders. We would like real fans  
14 who are listening to music, whether they are  
15 listening to it over and over again or not is fine,  
16 it is just as long as a real fan is listening to  
17 that, we want to compensate that content creator  
18 every single time that happens.

19 JUDGE FEDER: I understand that. My  
20 question or my concern is who decides? And is there  
21 any opportunity for a content creator to challenge  
22 the determination that Apple makes that that was not  
23 a legitimate play?

24 THE WITNESS: Well, we have an audit  
25 process, so that does exist. It is not as though

1 the content owners or the sound recording labels  
2 don't have the ability to, you know, to come and  
3 speak with us about that very specific fact.

4           This is not something that is a problem  
5 where every single pop song that we have is being  
6 fraudulently played. And so it is something that we  
7 spend quite a bit of time monitoring. And there is  
8 a process where we can speak with the -- with those  
9 rightsholders, so that does exist.

10           But I think it is in all of our interests  
11 to make sure we have legitimate consumers listening  
12 to music in legitimate ways.

13           JUDGE STRICKLER: I thought you mentioned  
14 before that your direct deals were  
15 percentage-of-revenue rates. So if they are  
16 percentage of revenue, this issue doesn't come up,  
17 right?

18           THE WITNESS: Well, it is -- that's not  
19 going to come up here, but it is certainly going to  
20 -- in that particular case, but, again, we're not  
21 running a service to have bots fooling us all day  
22 long.

23           So we want to make sure that in this  
24 particular context here, that where we have a  
25 per-stream rate, that we are counting legitimate



1 streams for legitimate plays.

2 JUDGE STRICKLER: Do you have a per-play  
3 rate structure, whether it is for sound recordings  
4 now or royalties or for mechanical royalties in your  
5 direct deals that are on a per-play basis?

6 JUDGE FEDER: You might want to go into  
7 restricted.

8 JUDGE STRICKLER: Yeah, if you need to go  
9 into restricted.

10 BY MR. CENDALI:

11 Q. Can you speak to this on a non-restricted  
12 basis or not? Do you understand the question?

13 JUDGE STRICKLER: You don't want to  
14 reveal things.

15 THE WITNESS: I certainly don't want to  
16 reveal things that are proprietary for Apple. So I  
17 would prefer to not reveal that right here, if we  
18 can.

19 MS. CENDALI: Can we save it to the  
20 restrictive portion of the exam?

21 THE WITNESS: Is that okay?

22 BY MR. CENDALI:

23 Q. So let's turn to the next item on a  
24 feature of Apple's proposal, the plays greater or  
25 equal to 30 seconds.

1                   Could you explain why Apple is proposing  
2 that?

3           A.    Yes.   So equal or greater to 30 seconds,  
4 30 seconds is an industry standard at this point for  
5 a sampling rate. We believe that anything below 30  
6 seconds is not really a listening experience.  
7 Beyond 30 seconds, we believe that the music fan is  
8 actually engaged and listening and that is an active  
9 listening experience.

10                   The problem that we have is that, you  
11 know, in the content owners proposal, that if a song  
12 is played, that that creates a structure for a  
13 payment. And that is a problem because there are  
14 often times when somebody is skipping through music,  
15 trying to find something, they listen to something,  
16 it is not what they want, or they by accident hit  
17 the play button and they are not intending to  
18 listen.

19                   So what we're interested in here is in a  
20 play that was meaningful. It was an intended play  
21 and the person has listened through long enough to  
22 enjoy that song.

23 BY MR. CENDALI:

24           Q.    Now, turning to the last item on the  
25 proposal, all-in, is Apple's proposal of the .00091

1 rate an all-in rate?

2 A. It is an all-in rate.

3 Q. Could you explain what that means and why  
4 Apple is proposing it?

5 A. Sure. So the all-in rate applies to both  
6 the mechanical and to the performance. And, again,  
7 what we're trying to do here is create one rate that  
8 makes it easy for that songwriter, the publisher, to  
9 understand, and so we believe that the all-in rate  
10 is the right approach.

11 Q. Now, let's turn to the Copyright Owners'  
12 proposal in this proceeding. Have you reviewed that  
13 proposal?

14 A. Yes.

15 Q. Let's look at Apple Demonstrative 9. Do  
16 you recognize this as summarizing some of the  
17 aspects of the Copyright Owners' proposal?

18 A. I do.

19 Q. Now, first, as a threshold matter, do you  
20 understand that the Copyright Owners are also  
21 proposing a per-play rate structure?

22 A. They are.

23 Q. And in that area, is Apple in agreement  
24 with the Copyright Owners?

25 A. We are.

1 Q. All right. Now, let's look, though, at  
2 the first bullet on the right-hand side of Apple  
3 Demonstrative 9, referring to mechanical-only.

4 Does Apple support the Copyright Owners'  
5 proposal of a mechanical-only royalty?

6 A. We do not.

7 Q. Why?

8 A. Well, the mechanical-only only addresses  
9 one portion of the overall payment. And of course  
10 the performance is not contemplated there. And so  
11 when you add the performance rate on top of that, in  
12 our opinion is -- it is far reaching and it creates,  
13 again, more uncertainty for us in being able to  
14 explain exactly how much is being paid, but also it  
15 creates for us a financial issue in being able to  
16 run our service.

17 JUDGE STRICKLER: Isn't the performance  
18 royalty paid on a percentage basis, percentage of  
19 revenue?

20 THE WITNESS: Um-hum.

21 JUDGE STRICKLER: So you have to convert  
22 the percentage of revenue in some way into a flat  
23 per-play rate in order to figure out what the all-in  
24 rate is?

25 THE WITNESS: Yeah, so the all-in rate is

1 the performance rate, the all-in rate minus the  
2 performance rate arrives at the mechanical rate.

3 JUDGE STRICKLER: But how do you convert  
4 the performance rate, which is a percentage into a  
5 per-play rate, since it is a per-play rate structure  
6 that you are proposing, if you know?

7 THE WITNESS: I do not know. I'm sorry.

8 JUDGE STRICKLER: Thank you.

9 BY MR. CENDALI:

10 Q. All right. Now, would having a  
11 mechanical-only rate mean that you would have to  
12 have separate negotiations for the performance rate?

13 A. It does mean that, yes.

14 Q. And to what extent would that impact any  
15 issues of transparency or predictability?

16 A. Well, again, then there is a separate  
17 negotiation with another rate, and it has added more  
18 complexity to the overall payment and to the  
19 understanding by the community, we believe, to how  
20 they are being compensated.

21 Q. Now, let's look at the second bullet on  
22 the ride side of the demonstrative, Apple  
23 Demonstrative 9, which is the Copyright Owners'  
24 proposal, the .0015 per-play rate.

25 Does Apple support that per-play rate?

1 A. We do not.

2 Q. Why not?

3 A. So, again, as I have said previously, we  
4 believe that this amount is in excess of what we  
5 think is the fair rate. The fair rate is the one  
6 that we have put forth, .00091.

7 And we believe that that is the right  
8 rate for us to go with as an industry.

9 JUDGE STRICKLER: Excuse me. I am still  
10 confused. Maybe it is me, maybe I am being dense  
11 about this, but I understand that you think yours is  
12 fairer, but I still don't understand, other than  
13 that it is simpler, maybe that is all there is, what  
14 it is that makes you conclude that it is fairer?

15 THE WITNESS: Well, if we look at how the  
16 current payment structure works with how songs are  
17 being valued, there is a percentage basis right now  
18 that values songs at significantly less than this on  
19 the stream basis, and then there is this proposal,  
20 which we believe is more than what is the fair rate.

21 And so we believe that the rate that sits  
22 in the middle of that or that sits somewhere in the  
23 middle of that is a fairer way to approach this.  
24 And, again, it is a simple approach that is based on  
25 how the charts work, what the mechanical is, and we

1 arrive at a number that we believe is consistent  
2 with industry standards today.

3 JUDGE STRICKLER: Okay. So it is higher  
4 than the proposed rate by the other Services and the  
5 existing rate, but it is lower than what the  
6 Copyright Owners want. So --

7 THE WITNESS: Sure.

8 JUDGE STRICKLER: So I should have said  
9 honest broker, I should have said Goldilocks, right?

10 THE WITNESS: That's exactly how I  
11 phrased it yesterday. It is kind of like the baby  
12 bear, if you want to think about it that way, it's  
13 not too hot, not too cold, it's just right.

14 JUDGE STRICKLER: Okay. And I don't know  
15 if that was a popular story or not --

16 THE WITNESS: I don't know, but we're in  
17 agreement.

18 JUDGE STRICKLER: Very good.

19 BY MR. CENDALI:

20 Q. To ask it another way, Mr. Dorn, is  
21 Apple's rate the product of the conversion rate we  
22 discussed earlier of the download to the 1-to-100  
23 conversion rate based on the industry -- the charts  
24 for Billboard and the OCC, et cetera?

25 A. That's correct. We're using industry

1 standards today to arrive at a rate.

2 Q. And so are the Copyright Owners rate that  
3 it proposes, would it be higher than what would be  
4 reflected in the conversion rates at either 1-to-100  
5 or 1-to-150 as reflected by the --

6 A. It would be, yes.

7 Q. All right. Now, I am looking at the  
8 third bullet on the demonstrative, the per-user  
9 prong. Do you understand that the Copyright Owners  
10 are suggesting, in addition to a per-play rate, that  
11 there would also be a greater-of payment to them of  
12 \$1.06 per user?

13 A. Yes, we do. I do.

14 Q. Does Apple support that?

15 A. Apple does not support that.

16 Q. Why not?

17 A. So, again, it adds more complexity to the  
18 overall equation. It makes it harder for people to  
19 understand how they are being paid. And I would  
20 also add that part of the proposal is a per-user  
21 \$1.06 regardless of the user.

22 So when we look at our family plan, that  
23 would be \$6.36 potentially that could be added per  
24 user. And we just simply could not offer that  
25 family plan with a \$6.36 per-user rate on a monthly



1 basis.

2 JUDGE STRICKLER: When you say it would  
3 add the \$1.06 per user, would add complication and  
4 be harder for people, I think is the word you used,  
5 people to understand --

6 THE WITNESS: Songwriters. Yeah.

7 JUDGE STRICKLER: Songwriters are people  
8 too.

9 THE WITNESS: They are. I just wanted to  
10 make sure we were talking about the actual  
11 subscribers to the service.

12 JUDGE STRICKLER: So we're talking about  
13 songwriters. It is your testimony then we should  
14 set a rate based on what we think songwriters as a  
15 whole are capable of understanding?

16 THE WITNESS: I am not sure I would state  
17 it that way. I am going to go back to stating it  
18 the way that I did so far, that there are industry  
19 standards that existed for a very long time that are  
20 accepted. And what Apple is saying is that those  
21 industry standards are simple, easy to understand,  
22 and fair.

23 And what we should do is we should create  
24 the same level at this point, the time is right now  
25 to create the same level of simplicity,

1 transparency, and fairness, in the way that the rate  
2 is structured. And the more things that we add on  
3 top of this, the more difficult it is, one, for, I  
4 believe, the content owners to understand in how  
5 they are being paid and, Number 2, it adds a level  
6 of complexity for the service providers to be able  
7 to operate their services and to be profitable to  
8 continue to invest.

9               So in this particular case, I think it  
10 adds more complexity, but what it also does is it  
11 creates a very difficult environment for the service  
12 providers collectively because it significantly  
13 increases the costs of those copyright payments.

14              JUDGE STRICKLER: So the ability of  
15 songwriters to understand the rates is only one  
16 factor among several?

17              THE WITNESS: That is correct. And I  
18 think we always have to look at -- and I think  
19 that's the basis of our proposal overall, is that  
20 there is the community that is creating content and  
21 then there is the community that is building the  
22 services that helps to get this content in front of  
23 consumers in ways that creates engagement and  
24 generates revenues.

25              And both of them have an interplay here

1 in how we look at these rates and how they affect  
2 that overall equation.

3 BY MR. CENDALI:

4 Q. So, Mr. Dorn, if under the Copyright  
5 Owners' proposal, if an Apple Music subscriber  
6 listens to one song a month, would Apple Music have  
7 to pay \$1.06?

8 A. We would. So we would have to pay if  
9 they listened to only one song. We would also have  
10 to pay if they came in at the beginning of the month  
11 on the first day or on the last day of the month,  
12 we're still responsible for that payment.

13 Q. Now, let's look at the last or the fourth  
14 bullet.

15 JUDGE FEDER: Excuse me. If that same  
16 consumer listens only to one song, you still get  
17 paid \$9.99 for the month, correct?

18 THE WITNESS: That is true.

19 JUDGE FEDER: And if the user listens to  
20 700 songs, they still pay \$9.99?

21 THE WITNESS: That is true.

22 JUDGE FEDER: Okay.

23 BY MR. CENDALI:

24 Q. But for the \$9.99, Mr. Dorn, do you  
25 believe that consumers are getting the features of

1 Apple Music that we discussed earlier?

2 A. That's true. And so there are other  
3 things inside the ecosystem that that person can be  
4 paying for. There are social aspects. There is  
5 interaction with the artist community through  
6 Connect. There are different things that that  
7 person can do inside of Apple Music that creates  
8 value.

9 And the songs are obviously a large  
10 portion of what is available to the consumer who is  
11 paying that monthly subscription, but there are  
12 other aspects of the service.

13 Q. Now, Mr. Dorn, looking at the fourth  
14 bullet, the 1.5 percent late fee per month, do you  
15 understand that the Copyright Owners are suggesting  
16 such a fee?

17 A. Yes.

18 Q. What is Apple's view of that?

19 A. So Apple doesn't support this for a  
20 couple of reasons. One, on an annual basis, that's  
21 a pretty high percentage rate, 18 percent, when we  
22 look at that over 12 months, but the other problem  
23 that we have is that there is an issue, and it is a  
24 known issue inside of the music industry, especially  
25 with Services, it is something called unmatched.

1           It is where songs are sold or streamed  
2 where we actually don't know who the songwriter is  
3 or the publisher in some cases. All of the  
4 information hasn't been supplied to us. And while  
5 we endeavor to pay everyone, every time something is  
6 streamed, and that is our goal, there are just  
7 sometimes where we don't have that information. It  
8 hasn't been supplied to us. And so we have to spend  
9 some time trying to figure out who it is we are  
10 supposed to pay. We do that, but it takes time.

11           JUDGE STRICKLER: I think one of the  
12 other Services' witnesses testified as to a  
13 willingness to pay those unmatched royalties into an  
14 interest-bearing escrow fund. I don't want to give  
15 you legal analogies, you are not a lawyer. But  
16 would Apple be willing to do that as well, to avoid  
17 the late fee issue?

18           THE WITNESS: I am not the right person  
19 to address that to from Apple, so I couldn't comment  
20 on that.

21           JUDGE STRICKLER: Thank you.

22           JUDGE FEDER: Who responsibility is it to  
23 get you that information that is used to match songs  
24 to publishers?

25           THE WITNESS: It is the publishing

1 community. Harry Fox is who we deal with to get  
2 that information. And we work very closely with  
3 them to get it. We just don't always get it for  
4 every single song and every writer. So it takes  
5 time.

6 JUDGE FEDER: Have you encountered that  
7 problem, again this might be something for  
8 restricted session, but is this a problem you have  
9 encountered in paying mechanical royalties for  
10 downloads?

11 THE WITNESS: Um-hum, absolutely. Yeah.  
12 Unmatched income is a problem that exists on the  
13 download or the streaming side.

14 BY MR. CENDALI:

15 Q. Now, turning then to the last bullet of  
16 the Copyright Owners' proposal, do you, referring to  
17 the Copyright Owners' proposal to eliminate the  
18 music locker categories, does Apple support this?

19 A. No, Apple does not support this.

20 Q. Does Apple have a live proposal with  
21 regard to music lockers?

22 A. We do.

23 Q. Let me show you Apple Demonstrative 10.  
24 Do you recognize this as a summary of Apple's locker  
25 services proposal?

1 A. I do.

2 Q. And so focusing on the first red box on  
3 Demonstrative 10, what is Apple's proposal for paid  
4 locker services?

5 A. Apple's proposal on the paid locker  
6 services is 17 cents per subscriber per month.

7 Q. And is that the current statutory  
8 minimum?

9 A. Yes.

10 Q. So now looking at the second red box on  
11 Demonstrative 10, what is Apple's proposal for  
12 purchased content locker services?

13 A. Apple's proposal is zero royalties.

14 Q. Now, looking back at Apple Demonstrative  
15 9, do you understand that in the Copyright Owners'  
16 proposal for locker services, the Copyright Owners  
17 are seeking a royalty for every time a song streams,  
18 even if it was already purchased by the consumer?

19 A. Yes.

20 Q. Does Apple support that?

21 A. No.

22 Q. Why not?

23 A. So traditionally when a song is  
24 purchased, and when I use the word traditionally, I  
25 mean historically for decades, a song is purchased

1 and the copyright owner is paid at that purchase  
2 time, so whether it is a song that is purchased from  
3 the iTunes Music song, a single on vinyl, an album,  
4 whether it is physical or digital, we pay for each  
5 of those songs. And the consumer -- the contract is  
6 that the consumer is allowed to listen to that music  
7 as often as they want, any time they want. But  
8 there is no future payment.

9                   And so when we talk about a paid locker  
10 with zero royalties, what we're saying is there are  
11 people who have been purchasing music for many  
12 years.

13                   JUDGE STRICKLER: You mean purchase  
14 content?

15                   THE WITNESS: It is purchased content,  
16 yeah. And that purchased content is coming from  
17 different means, but from the iTunes Music store, if  
18 we just look at that, Apple's business that we run,  
19 when somebody buys that song, they have the ability  
20 to listen to that any time. They don't get -- there  
21 is no further compensation at the mechanical level.

22                   And the locker service that we operate  
23 with zero royalties is merely for the ability to  
24 re-download that song to their device. Maybe their  
25 device was stolen. Maybe the device burned in a



1 fire or was damaged in some way or they buy a new  
2 device.

3 So all we're saying is you have purchased  
4 the content, it is yours, and you have the ability  
5 to re-download the content and listen to it.

6 JUDGE STRICKLER: Are there costs  
7 involved in Apple constructing the purchased content  
8 locker service?

9 THE WITNESS: Your just need to define  
10 costs. When you say cost, cost to the consumer or  
11 cost to Apple?

12 JUDGE STRICKLER: I'm sorry, cost to  
13 Apple.

14 THE WITNESS: Costs to Apple, yes, there  
15 are always costs for us having to run a service  
16 where there are servers and re-download, but that's  
17 part of what we do for the customer is that they  
18 have the ability to re-download that song as many  
19 times as they would like.

20 JUDGE STRICKLER: Are there marginal  
21 costs to Apple with regard to maintaining a  
22 purchased content locker service; that is, every  
23 time someone wants to store a song in the cloud  
24 through a purchased content locker service, is there  
25 a positive cost that is incurred by Apple?

1 THE WITNESS: So are we talking about now  
2 the other kind of locker service, which is the one  
3 where we sell that locker service on an annual  
4 basis?

5 JUDGE STRICKLER: No. I am talking about  
6 the one you want for zero royalties.

7 THE WITNESS: So for zero royalties when  
8 a consumer purchases a song or album from iTunes and  
9 it sits there and then they download it to their  
10 device, I want to make sure I am clear, that that's  
11 the instance you are referring to?

12 JUDGE STRICKLER: You could also do it  
13 off streaming as well, somebody who has a  
14 subscription to an Apple streaming product has the  
15 ability to store a product as well when they  
16 purchase content locker service? Or no?

17 THE WITNESS: They have purchased content  
18 that historically, and they are able to stream  
19 content from the Apple Music streaming service.

20 JUDGE STRICKLER: And store that?

21 THE WITNESS: Well, yes, it is stored  
22 there in perpetuity as a result of being purchased  
23 previously from the iTunes Music store.

24 JUDGE STRICKLER: Let him finish.

25 MS. CENDALI: I'm sorry.

1                   THE WITNESS: So what I was referring to  
2 is that that content that they have purchased  
3 previously, they have access to listen to that.  
4 That does sit in a locker that is from a purchased  
5 piece of content.

6                   But it is not the streamed content that  
7 sits in the Apple Music streaming service. In other  
8 words, that is content that they have not purchased  
9 previously and that they are listening to.

10                  JUDGE STRICKLER: Purchased content  
11 locker service only refers to the downloads?

12                  THE WITNESS: It is a download locker  
13 service, yes.

14                  JUDGE STRICKLER: So when somebody  
15 decides to put a song that they have downloaded into  
16 the purchased content locker, is there a marginal  
17 cost every time a song is put into that purchased  
18 content locker? Is there a positive cost of any  
19 sort incurred?

20                  THE WITNESS: I don't know the answer to  
21 that question.

22                  JUDGE STRICKLER: Okay. One last quick  
23 question on locker services. Does Apple offer a  
24 paid locker service?

25                  THE WITNESS: Apple previously offered a

1 paid locker service. We no longer offer that to new  
2 consumers. It is a service that still exists for  
3 those who have subscribed historically to that  
4 service, but we don't offer it any more.

5 JUDGE STRICKLER: So going forward with  
6 new consumers, you want zero royalties for the  
7 purchased content locker service that you do offer,  
8 but a positive rate for the paid locker service that  
9 other services offer, not Apple going forward?

10 THE WITNESS: Well, to the service that  
11 Apple historically operated, in other words, the one  
12 that we still maintain for those who are still  
13 paying for that service, that is what we are  
14 proposing the .17 cents, the .17 cents per month,  
15 per subscriber. That -- we still maintain that  
16 service. We just don't offer it to anyone as a new  
17 user.

18 JUDGE STRICKLER: So new users on other  
19 services, if they wanted to use a paid locker  
20 service would pay a positive fee, and Apple would  
21 only offer their purchased content locker services?

22 THE WITNESS: I can't speak for other  
23 services, but I can certainly speak for Apple. We  
24 don't offer that service any more.

25 JUDGE STRICKLER: Thank you. I think

1 there is another question.

2 JUDGE BARNETT: Mr. Dorn, the purchased  
3 content locker service is not a separately-available  
4 service that consumers pay for. Is it included in  
5 the \$9.99?

6 THE WITNESS: No. It is separate.

7 JUDGE BARNETT: It is separate?

8 THE WITNESS: It is separate. So think  
9 about it this way. It is not something that you  
10 sign up for and that you pay for. If you buy music  
11 from Apple, we have a record of the fact that you  
12 have purchased that music from us historically.

13 JUDGE BARNETT: So it is automatic?

14 THE WITNESS: It is an automatic access  
15 to things that you have purchased previously.

16 JUDGE BARNETT: From Apple?

17 THE WITNESS: From Apple, exactly.

18 JUDGE BARNETT: But a user couldn't  
19 upload CDs that they have purchased and store them  
20 in that?

21 THE WITNESS: So that is our previous  
22 service that we offered.

23 JUDGE BARNETT: That was the paid locker?

24 THE WITNESS: That's the paid locker  
25 service that we no longer offer to consumers.

1 JUDGE BARNETT: Okay. Thanks.

2 BY MR. CENDALI:

3 Q. So one last question, I think, for me on  
4 the locker services. What would the business effect  
5 be of implementing the Copyright Owners' proposal on  
6 lockers on Apple?

7 A. Well, first, it would make it impossible  
8 for us to offer those services if we chose to do it  
9 again. We don't currently offer that. But it  
10 certainly would not make it feasible for us to offer  
11 a locker service.

12 And from what I understand, the content  
13 owners are proposing \$1.06 per user for those locker  
14 services, for content that is accessed, meaning  
15 previously purchased content. And I am talking now  
16 about content that is purchased from the iTunes  
17 Music store, and so we could not offer that on a per  
18 user basis for the number of people who access their  
19 music that they have previously purchased.

20 Q. Now, I have about two minutes that is  
21 restricted session and then I should be done with my  
22 questions, subject to whatever questions the Board  
23 would have. I would like to go then to restricted  
24 session. It will be brief.

25 And because I am only talking about Apple

1 restricted content, the Apple in-house lawyers who  
2 are here, I believe, can stay. I don't know if  
3 there is anyone else who would not apply but of  
4 course it is up to Your Honor.

5 JUDGE BARNETT: Okay. Thank you. At the  
6 end of this restricted session, we will take our  
7 recess. So anybody who is going out now, feel free  
8 to take off and get a cup of coffee or whatever.

9 So if you are in the courtroom or hearing  
10 room and do not have authorization to hear  
11 privileged, restricted, or confidential information,  
12 please wait outside. There is a huge group of  
13 people who came in and is sitting together. I don't  
14 know who you are.

15 MS. CENDALI: Those are my team at Apple.  
16 They have been working really, really hard over at  
17 Kirkland's offices. You also will see two of our  
18 experts who will be testifying soon thereafter, to  
19 get a feel for the court. And I am also like to  
20 introduce you, Your Honor, to this time to Mr.  
21 Robert Windham, in-house counsel for Apple and David  
22 Weiskopf, in-house counsel for Apple. So basically  
23 they are my guys.

24 JUDGE BARNETT: Thank you. And this is  
25 the way you reward them?

1 (Laughter)

2 MS. CENDALI: Well, Your Honor, they are  
3 really excited to get to go to court. So --

4 JUDGE BARNETT: Okay.

5 JUDGE STRICKLER: Check with them in a  
6 few minutes.

7 MS. CENDALI: We will check in about six  
8 months and then we will know.

9 (Whereupon, the trial proceeded in  
10 confidential session.)

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1 O P E N S E S S I O N

2 CROSS-EXAMINATION

3 BY MS. ARORA:

4 Q. My name is Kaveri Arora, but I represent  
5 the Copyright Owners.

6 JUDGE BARNETT: I'm sorry, counsel. Are  
7 there any representatives of the other Services who  
8 want to cross-examine this witness before the  
9 Copyright Owners do?

10 MR. ELKIN: Not Amazon.

11 MR. STEINTHAL: No.

12 MR. MARKS: No.

13 JUDGE BARNETT: All right. Thank you.  
14 Apology. I had instructed everyone to be sure and  
15 let me know if you did, but given there is a bit of  
16 a dichotomy on this side of the -- okay. Go ahead.  
17 BY MS. ARORA:

18 Q. The percentage-of-revenue structure was  
19 the product of a 2008 settlement, correct?

20 A. Yes.

21 Q. And I think you testified that in 2008  
22 the long-term prospects for interactive streaming  
23 were uncertain; is that right?

24 A. Yes.

25 Q. And you state in your written direct

1 statement that because the future of the interactive  
2 streaming market were uncertain in 2008, a  
3 percentage-of-revenue structure was appropriate  
4 because it avoided the burden of the Services paying  
5 a fixed cost while the market was still developing;  
6 is that right?

7 A. Yes.

8 JUDGE STRICKLER: You are making  
9 reference to his written direct?

10 MS. ARORA: Paragraph 30, Your Honor.

11 JUDGE STRICKLER: Thank you.

12 BY MS. ARORA:

13 Q. But you would agree today that the  
14 interactive streaming industry is no longer an  
15 untested market, correct?

16 A. Yes.

17 Q. And, in fact, it is a very popular method  
18 of music distribution and consumption, correct?

19 A. Yes.

20 Q. And I believe you state in your written  
21 direct statement that industry reports show that the  
22 important role that interactive streaming services  
23 play in the current digital music marketplace; is  
24 that right?

25 A. Yes. And can I just ask you, can you

1 speak up a little bit?

2 Q. Sure.

3 JUDGE FEDER: Can you move the microphone  
4 closer?

5 THE WITNESS: Too many years in rock  
6 shows for me, sorry.

7 BY MS. ARORA:

8 Q. No, it is fine. And also in your written  
9 direct statement you state that digital music  
10 revenue in the United States grew about 370 million  
11 dollars from the first half of 2015 to the first  
12 half of 2016 in large part due to a growth in paid  
13 subscription to the music streaming services; is  
14 that right?

15 A. Correct.

16 Q. Okay. And based on this shift from an  
17 unproven market to a popular industry, isn't it true  
18 that a percentage-of-revenue structure which  
19 protects services by allowing them to enter the  
20 market without paying for music being streamed is no  
21 longer appropriate?

22 A. That is Apple's position.

23 MR. STEINTHAL: Object, Your Honor.  
24 There is so many -- I mean, it is an incomplete  
25 hypothetical.

1 JUDGE BARNETT: Is that an objection or  
2 is that just a whinge?

3 MR. STEINTHAL: There is so much in  
4 there, Your Honor, that it is subject to  
5 interpretation and hypothetical that --

6 JUDGE BARNETT: Well, if the witness  
7 can't answer the question, he can indicate that he  
8 can't interpret the question.

9 THE WITNESS: I'm sorry, could you repeat  
10 the question?

11 BY MS. ARORA:

12 Q. Sure. And this is actually taken from  
13 Mr. Dorn's direct, written direct testimony. It is  
14 paragraph 32. And what I asked is based on a shift  
15 from an unproven market to a popular industry, isn't  
16 it true that a percentage-of-revenue structure which  
17 protects Services by allowing them to enter a market  
18 without paying for music being streamed is no longer  
19 appropriate?

20 A. That is Apple's position.

21 Q. Thank you.

22 JUDGE STRICKLER: Well, you actually  
23 didn't read the entire thing there. You left out  
24 the parenthetical, which is not parenthetical, just  
25 literally parenthetical. Your question can stand,

1 of course, but you had said on the record you were  
2 just reading his testimony, but you left out the  
3 parenthetical.

4 MS. ARORA: My apologies, Your Honor.

5 JUDGE STRICKLER: The parenthetical says,  
6 just so the record is clear, without picking up from  
7 the word without, "without paying for the music  
8 being streamed, (unless they have subscribers who  
9 earn revenues in other ways)." Now it is read out  
10 of his testimony.

11 MR. STEINTHAL: Thank you, Your Honor.

12 MS. ARORA: Thank you.

13 BY MS. ARORA:

14 Q. And I am actually now moving to your  
15 rebuttal testimony. And in paragraph 18 of your  
16 rebuttal testimony, you state that some publishers  
17 have shifted their catalogues from ASCAP and BMI to  
18 SESAC; is that correct?

19 A. Yes.

20 Q. Do you know which publishers have shifted  
21 their catalogues from ASCAP and BMI to SESAC?

22 A. I don't have a list of that.

23 Q. Okay. And we're actually now moving to  
24 restricted session.

25 MS. CENDALI: Counsel, is it restricted

1 as to Apple as well or not?

2 MS. ARORA: No, it is not.

3 MS. CENDALI: Thank you.

4 JUDGE BARNETT: You know the drill.

5 (Whereupon, the trial proceeded in  
6 confidential session.)

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1 O P E N S E S S I O N

2 BY MS. ARORA:

3 Q. Moving back to your rebuttal testimony  
4 and turning to page, I'm sorry, paragraph 45, I'm  
5 sorry.

6 My apologies. You state that "moreover,  
7 the proposed late fee applies to all late payments  
8 regardless of why they are late. There is a big  
9 difference, however, between an interactive  
10 streaming service making a late payment because it  
11 did not calculate its payment in a timely manner and  
12 an interactive streaming service making a late  
13 payment because it does not know who to pay."

14 I'd like to focus on the part of your  
15 statement regarding the interactive streaming  
16 services not knowing who to pay. Isn't it true that  
17 under Section 115 if you want to obtain a mechanical  
18 license, you need to serve an NOI, also known as a  
19 notice of intention on the copyright owner in  
20 advance of using the license?

21 A. I don't have that particular document in  
22 front of me, so I'd have to look at that.

23 Q. Okay.

24 A. I am not familiar with that.

25 Q. Are you aware that a notice of intention

1 needs to be served on a copyright owner in advance  
2 of obtaining a mechanical license?

3 A. I am not aware of that.

4 Q. Okay. Okay. And going to paragraph 44  
5 of your testimony, you --

6 JUDGE FEDER: Rebuttal testimony?

7 MS. ARORA: Rebuttal, my apologies.

8 BY MS. ARORA:

9 Q. You state that the Copyright Owners are  
10 proposing a 1 and a half percent late fee per month  
11 for late interactive streaming and limited download  
12 royalty payments and you describe this as an  
13 exorbitant penalty; is that correct?

14 A. Yes.

15 Q. But are you aware that this is currently  
16 the late fee in the statute for Subpart A?

17 A. I am not aware of that.

18 Q. Okay. Do you believe that a late fee  
19 should be different for one licensee, meaning a  
20 record label, do you think they should be charged a  
21 higher late fee than another licensee, meaning a  
22 streaming service?

23 A. I'm sorry, can you restate that?

24 Q. Do you think that one licensee, meaning  
25 let's say a record label, should be charged a higher



1 fee for a late payment than another licensee, let's  
2 say a streaming service?

3 A. I'm sorry, I don't have an answer for  
4 that question because I haven't actually considered  
5 the question previously. So I don't know.

6 MS. ARORA: I have no further questions.

7 JUDGE BARNETT: Ms. Cendali, will this be  
8 open?

9 MS. CENDALI: It will be closed but very  
10 brief. If we're still on restricted?

11 JUDGE BARNETT: No, we're open.

12 MS. CENDALI: Oh. It would be easier if  
13 it were restricted. I am just not sure, I'm sorry.

14 JUDGE BARNETT: Okay.

15 MS. CENDALI: But it is very brief.

16 JUDGE BARNETT: Mr. Steinthal?

17 MR. STEINTHAL: I just have one question  
18 to clarify an answer he gave, if that's okay.

19 CROSS-EXAMINATION

20 BY MR. STEINTHAL:

21 Q. When you testified you believed Apple  
22 would pay less under Apple's proposal than it does  
23 today, were you referring to what Apple actually  
24 pays publishers today rather than what Apple would  
25 pay under the current statutory rate structure?

1           A.    I'm referring to the fact that the  
2 proposal is not the same valuation as what we  
3 currently are paying today. That's what I'm  
4 referring to.

5           MR. STEINTHAL: Thank you.

6           JUDGE STRICKLER: So the comparison is  
7 between what you are paying under your direct  
8 license versus Apple's proposal, not the statutory  
9 rate as it exists today versus what Apple is paying  
10 today?

11          THE WITNESS: Yes.

12          JUDGE STRICKLER: Thank you.

13          (Whereupon, the trial proceeded in  
14 confidential session.)

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1 O P E N S E S S I O N

2 JUDGE BARNETT: While we're waiting for  
3 the distribution of binders, let's ask the witness  
4 if you would please state your full name and spell  
5 your last name for the record. Why don't you spell  
6 both of your names.

7 THE WITNESS: Sure, no problem, Jui  
8 Ramaprasad, J-u-i, and Ramaprasad is  
9 R-a-m-a-p-r-a-s-a-d.

10 JUDGE BARNETT: Thank you.

11 MS. SCHMITT: Your Honors, just to  
12 clarify, we're passing out three binders, but I  
13 think you only have to really have one in front of  
14 you for the oral testimony, the first one.

15 JUDGE BARNETT: Thank you.

16 JUDGE STRICKLER: It begs the question  
17 why do we have three?

18 MS. SCHMITT: We provided other support  
19 for Doctor -- for the Professor's opinion and we  
20 wanted to present that, allow Your Honors to have it  
21 for the record, but we will, we won't be actively  
22 asking her about it today.

23 JUDGE STRICKLER: Are these documents in  
24 addition to the documents that were already  
25 submitted as part of the record in connection with

1 all of the written direct statements?

2 MS. SCHMITT: These are documents that  
3 she cites as exhibits in her written statements.

4 JUDGE STRICKLER: But are not themselves  
5 exhibits?

6 MS. SCHMITT: Yes, that's right. We  
7 won't be admitting or asking, admitting exhibits  
8 that have already been introduced as this proceeding  
9 goes on. Those will be taken out, de-duped.

10 JUDGE STRICKLER: Counsel has a response  
11 to that?

12 MR. SCIBILIA: I just want to clarify, I  
13 don't know whether Apple is intending to move into  
14 evidence these three binders full of documents. I  
15 am aware that last night Apple informed us that they  
16 may introduce up to 111 separate exhibits with Ms.  
17 Ramaprasad, the vast majority are pages from blogs,  
18 news articles, all of which are hearsay being  
19 offered for the truth of the matter asserted.

20 JUDGE STRICKLER: When you say that they  
21 are being offered for the truth of the matter  
22 asserted, counsel has represented that to you?

23 MR. SCIBILIA: Well, in Ms. Ramaprasad's  
24 statement, she will make a statement about one of  
25 those blogs and cite it as if it is a fact.

1 JUDGE STRICKLER: Well, just before we  
2 get too deep into this thicket, as an expert witness  
3 she can testify as to things that an expert  
4 reasonably relies upon, even though it might  
5 otherwise be hearsay, not otherwise admissible. So  
6 do you know, in fact, which way she is going with  
7 it?

8 MR. SCIBILIA: That's a very fair point,  
9 Your Honor. And I don't want to waste the Court's  
10 time arguing the admissibility of each and every one  
11 of these 111 documents. I just wanted to upfront  
12 say that we believe they are all hearsay. As long  
13 as they are not being offered for the truth of the  
14 matter asserted, but, rather, as documents that she  
15 considered, we're not going to object to them or at  
16 least to 107 of the 111 exhibits. We do have  
17 specific objections to four of the exhibits which we  
18 can raise at the time that they arise.

19 MS. SCHMITT: That's right. As far as I  
20 understand, there is only four exhibits in these  
21 binders that we have disagreement of. I'm not  
22 planning to address the exhibits in the second and  
23 third binder until the end of the testimony. And I  
24 think we can address that at the time.

25 JUDGE BARNETT: Okay. Are you offering

1 those 107 for the truth of the matter asserted  
2 therein or as information upon which the expert  
3 relied?

4 MS. SCHMITT: The latter, Your Honor, to  
5 give -- to allow a holistic approach to her opinion.

6 JUDGE BARNETT: Thank you.

7 DIRECT EXAMINATION

8 BY MS. SCHMITT:

9 Q. Good afternoon, Professor.

10 A. Good afternoon.

11 Q. I just want to clarify you are appearing  
12 today as an expert witness for Apple in this matter?

13 A. Yes, I am.

14 Q. And I understand you just had a baby a  
15 couple weeks ago.

16 A. I did.

17 Q. Congratulations.

18 A. Thank you.

19 Q. I want to thank you for traveling down  
20 from Montreal to testify today.

21 MS. SCHMITT: And, Your Honors, just if I  
22 may ask your permission, Professor Ramaprasad is a  
23 new mother, and I think her baby is here, and I  
24 think she is okay until 5:00 o'clock, but tomorrow,  
25 at some point in her testimony, if she needs to take

1 a break to feed her baby, we might have to ask your  
2 lenience to let her do that.

3 JUDGE BARNETT: Not possible.

4 (Laughter)

5 JUDGE BARNETT: Of course.

6 MS. SCHMITT: This is a first for me.  
7 And also pursuant to the parties' agreement, the  
8 witness is here to testify both to her direct  
9 testimony, as well as her rebuttal just to limit her  
10 travel time.

11 JUDGE BARNETT: Thank you.

12 BY MS. SCHMITT:

13 Q. Turning back to your testimony,  
14 Professor, what is your area of expertise that is  
15 relevant to this proceeding?

16 A. I studied the digital music industry.  
17 I'm an expert in on-line music.

18 Q. And have you prepared or directed  
19 preparation of some demonstrative slides to  
20 accompany your testimony today?

21 A. Yes, I have.

22 Q. Turning to the first slide, which is  
23 marked Apple Demonstrative 11, can you describe what  
24 is on the screen, please?

25 A. Sure. This is my educational background

1 and my current employment.

2 Q. Can you briefly describe your educational  
3 background?

4 A. Sure. I did my Bachelor's degree at  
5 Marshall School of Business at the University of  
6 Southern California. I studied information systems  
7 and finance.

8 And then I completed my Doctoral degree  
9 at the Paul Merage School of Business at the  
10 University of California, Irvine, also in  
11 information systems, where my focus was really on  
12 studying the music industry and the technology  
13 impacts of the music industry.

14 Q. And could you explain what information  
15 systems means?

16 A. Sure. So information systems is sort of  
17 our academic word for studying information  
18 technology and its impacts on organizations and  
19 industries. And so obviously what I -- and what I  
20 just said is that I studied in particular  
21 information technology and the impacts on the music  
22 industry.

23 Q. And are you currently employed?

24 A. I am.

25 Q. And what is your title?



1           A.    I am an Associate Professor at the  
2 Faculty Management at McGill University.

3           JUDGE STRICKLER:  And you are a professor  
4 of what there?  Information systems?

5           THE WITNESS:  Information systems, yes.

6           JUDGE STRICKLER:  Thank you.

7 BY MS. SCHMITT:

8           Q.    And are you tenured?

9           A.    I am.

10          Q.    And how long have you been at the  
11 university?

12          A.    Since 2009.

13          Q.    And do you teach courses that pertain to  
14 on-line music?

15          A.    I do.  I have a course that we call The  
16 Treble Cliff, the Business of Music.  It is an  
17 interdisciplinary course that takes into  
18 consideration disciplines like law, music, obviously  
19 management, computer science, other disciplines, all  
20 disciplines that sort of feed into the music  
21 industry.

22          Q.    And have you done research with regard to  
23 on-line music?

24          A.    Yes, I have.

25          Q.    Could you describe that research

1 generally, please?

2           A.    Sure.  As I said, when I was describing  
3 my dissertation work, I look at the technology  
4 impacts on the music industry, in particular social  
5 media, design of on-line platforms, features that  
6 can be included to motivate payment, things like  
7 that.

8           Q.    And how long have you been doing research  
9 in the on-line music area?

10          A.    Over ten years.

11          Q.    And has any of your research on this  
12 topic been published?

13          A.    Yes, it has.

14          Q.    Can you explain some places it has been  
15 published?

16          A.    Sure.  So some of the top journals we  
17 have in information systems are Information Systems  
18 Research and Management Information Systems  
19 Quarterly, and my research has been published there.

20          Q.    And have you won any awards for your  
21 research?

22          A.    Yes, I have.  I have won, in terms of my  
23 on-line music research, I have won an award, Best  
24 Paper Award at the Conference on Information Systems  
25 and Technology, which is one of our bigger

1 conferences.

2 Q. And do you engage with, you know, outside  
3 academia, do you engage with music professionals  
4 from the industry in your work?

5 A. Yes, I do. So, as I said, I teach this  
6 class on the business of music and in that class we  
7 invite a wide variety of industry professionals for  
8 the students to interface with, and so this goes  
9 from, you know, people who work at record labels to  
10 artist managers to artists themselves to  
11 entertainment lawyers, so a broad range of people  
12 from across the music industry that we interact  
13 with.

14 I also often attend a variety of sort of  
15 industry events, Canadian Music Week, things like  
16 that, to continue my interaction -- education on the  
17 music industry.

18 Q. And do you speak on issues with regard to  
19 on-line music outside of academia?

20 A. Yes, I do. For example, I talk to press  
21 outlets often about my research on on-line music and  
22 its applicability to the real world. I have done  
23 some interviews with National Public Radio and  
24 MacLean's Magazine, things like that.

25 Q. And as a professor at McGill, which is in

1 Canada, is your research and teaching limited to the  
2 Canadian music industry?

3 A. No, not at all. As we know, the music  
4 industry is a global market, and the U.S. is a large  
5 part of that, so much of the discussions and the  
6 work that I do are around the U.S. music market as  
7 well as Europe and other markets as well.

8 Q. And are you trained in statistics?

9 A. I am.

10 Q. And are you aware of a discipline called  
11 econometrics?

12 A. Yes, I am.

13 Q. And can you describe what that is?

14 A. Sure. It is basically the application of  
15 statistics to economic issues or problems.

16 Q. And have you studied econometric methods?

17 A. I have.

18 Q. And do you use them as part of your work?

19 A. Yes. In many of my papers that are  
20 published I use econometrics.

21 Q. Thank you, Professor.

22 A. Sure.

23 MS. SCHMITT: Your Honors, at this point  
24 I would like to offer Professor Jui Ramaprasad as an  
25 expert in the digital music industry and

1 econometrics.

2 MR. SCIBILIA: My objection is -- I'm  
3 perfectly fine with having her offered as an expert  
4 in the music industry, although I don't believe she  
5 ever worked in the music industry.

6 I do object to her being offered as an  
7 econometrics expert. She hasn't laid -- you haven't  
8 laid that foundation. Just because she has studied  
9 it doesn't mean that she is an expert in it, nor  
10 have you proffered her as an expert in that either  
11 in her paper or in the slides that she is presented  
12 as a music expert.

13 MS. SCHMITT: Her qualifications, she  
14 just explained that she has used these techniques in  
15 her research. It is part and parcel of what she  
16 does. She is an academic. She studies music and  
17 the business of music. Part of that is statistics.  
18 She has written papers. They are all --

19 JUDGE BARNETT: Ms. Schmitt, you don't  
20 need to testify. You are arguing.

21 MS. SCHMITT: Your Honors, sorry.

22 JUDGE BARNETT: Why don't you ask her a  
23 few more questions to see if we can clear this up.

24 MS. SCHMITT: Sorry.

25 BY MS. SCHMITT:

1 Q. As part of your doctoral work, did you  
2 take classes in econometrics?

3 A. Yes, I did. I took many classes in  
4 econometrics, both theoretical and applied  
5 econometrics.

6 Q. Okay. And you have written many papers  
7 that have been published, correct?

8 A. Yes.

9 Q. And those are listed in your CV?

10 A. They are, yes.

11 Q. And for all -- for basically all those  
12 papers that are listed in your CV, did you use  
13 econometric methods in your research?

14 A. Yes, I did, yes.

15 Q. And do you feel, as part of your  
16 teaching, do you also review, excuse me, review your  
17 students' work?

18 A. I do. And actually as part of being an  
19 academic I review other academics' works that use  
20 applied econometric methods as well. I have to know  
21 it in order to do that.

22 Q. And as part of your work you assess those  
23 methods and determine whether you feel they are  
24 appropriate or accurate?

25 A. Yes, absolutely.

1 MS. SCHMITT: Thank you, Your Honors.

2 MR. SCIBILIA: I will just point out that  
3 nothing in her report contains any econometric  
4 analysis of anything whatsoever. So my objection  
5 stands.

6 JUDGE BARNETT: Dr. Ramaprasad is  
7 qualified as an expert in the music industry -- I  
8 have forgotten how you phrased it -- econometrics  
9 and digital music industry. Thank you.

10 MS. SCHMITT: Thank you, Your Honor.

11 BY MS. SCHMITT:

12 Q. Now I would like to turn to your written  
13 testimony in this proceeding.

14 Did you submit written testimony in this  
15 proceeding?

16 A. I did.

17 Q. We will discuss the details in a moment,  
18 but can you just briefly describe the subject matter  
19 of your written direct testimony?

20 A. Sure. I was asked to opine and analyze  
21 on whether Apple's proposal, rate proposal for this  
22 proceeding was reasonable.

23 Q. And did you, as part of your assignment,  
24 assess the four statutory factors that are at issue  
25 in this proceeding?

1 A. Yes, I did.

2 Q. And what was your ultimate opinion about  
3 Apple's rate proposal?

4 A. I thought it was fair and reasonable to  
5 both the songwriters and the streaming services.

6 Q. And if you look behind the first tab in  
7 the binder, the first binder in front of you, you  
8 will see a document marked Apple Trial Exhibit  
9 1615R. Let me know when you have that.

10 And, Professor, you could put those other  
11 two binders on the floor --

12 A. Okay.

13 Q. -- if they are in your way.

14 A. Yes, I have the document in front of me.

15 Q. Can you identify what it is?

16 A. Sure. It is my written direct testimony.

17 Q. Is your CV attached to that testimony?

18 A. Yes, it is.

19 Q. And turning to the end of your written  
20 testimony, do your declaration and signature appear  
21 on the last page?

22 A. Yes, they do.

23 MS. SCHMITT: Your Honors, at this point  
24 I would like to offer Apple Trial Exhibit 1615R into  
25 evidence.



1 MR. SCIBILIA: No objection.

2 JUDGE BARNETT: 1615 is admitted.

3 (Apple Exhibit Number 1615 was marked and  
4 received into evidence.)

5 BY MS. SCHMITT:

6 Q. And did you also submit written rebuttal  
7 testimony in this proceeding?

8 A. Yes, I did.

9 Q. And we will discuss the details of that  
10 later also, but can you briefly describe what the  
11 subject matter of your testimony was?

12 A. Sure. I opined and analyzed on the  
13 Copyright Owners' rate proposal. In particular I  
14 examined some of the benchmarks that Dr. Eisenach  
15 put forth.

16 JUDGE STRICKLER: When you say we're  
17 going to examine that later, she is coming back as a  
18 rebuttal witness or she is going to be doing that  
19 here?

20 MS. SCHMITT: She is going to be doing it  
21 here. I meant later in this session.

22 JUDGE STRICKLER: Thank you.

23 BY MS. SCHMITT:

24 Q. Please look at the second tab in the  
25 binder that you have and you will see a document

1 marked Apple Trial Exhibit 1616R. Let me know when  
2 you have that.

3 A. Yes, I have it.

4 Q. Is that your written rebuttal testimony  
5 in this proceeding?

6 A. Yes, it is.

7 Q. And turning to the back of that document,  
8 does your declaration and signature appear on that  
9 page?

10 A. Yes, it does.

11 MS. SCHMITT: Your Honors, at this point  
12 I would like to offer Apple Trial Exhibit 1616R into  
13 evidence.

14 MR. SCIBILIA: No objection.

15 JUDGE BARNETT: 1616 is admitted.

16 (Apple Exhibit Number 1616 was marked and  
17 received into evidence.)

18 BY MS. SCHMITT:

19 Q. Now I would like to discuss your views on  
20 Apple's proposal for interactive streaming.

21 A. Sure.

22 Q. I would like to put on the screen a prior  
23 demonstrative that was used in Mr. Dorn's testimony.  
24 Can you describe what is shown on the screen,  
25 please?

1           A.    Sure.  This is the rate proposal, or  
2  Apple's interactive streaming rate proposal.  It  
3  summarizes it as 0.00091 dollars per play, where a  
4  play is a non-fraudulent play that is longer than 30  
5  -- more than or equal to 30 seconds, and this is an  
6  all-in rate.

7           Q.    Okay.  I would like to first focus on  
8  your opinion about Apple's per-play rate structure  
9  or the per-play rate structure that is proposed.

10                   At a high level, what is your opinion of  
11  a per-play rate structure for interactive streaming?

12           A.    Sure.  I think generally it makes a lot  
13  of sense.  It is very fair and reasonable, as I  
14  said, predictable for the songwriters and the  
15  streaming services.

16                   On the songwriters' side it is  
17  predictable.  On the streaming services' side it  
18  allows them to sort of know their costs and be very,  
19  again, predictable again, which allows them to  
20  innovate and see the returns of their investments.

21           Q.    Does the current rate structure for  
22  interactive streaming which was adopted, first  
23  adopted in 2008, also use a per-play rate?

24           A.    Yes -- oh, no, it does not.  Sorry.

25           Q.    What is the current rate based on?

1           A.    It is a percentage of revenue, generally  
2 a percentage of revenue structure, with a few other  
3 prongs, including a per-user rate as well as a  
4 percentage of sound recording royalties.

5           Q.    And can you explain sort of in practical  
6 terms what this means for, you know, how the  
7 Services pay songwriters in exchange for having the  
8 right to stream their musical works?

9           A.    Sure. It means that the songwriters'  
10 royalty payments depend on the business model of the  
11 streaming services. So depending on the revenues of  
12 the streaming services, songwriters' payments -- the  
13 songwriters' payments depend on that.

14          Q.    Does the current interactive streaming  
15 industry differ from the interactive streaming  
16 industry in 2008 when the current rate was adopted?

17          A.    Yes, it does.

18          Q.    I would like to turn to Apple  
19 Demonstrative 12.

20                JUDGE STRICKLER: Just before you do,  
21 just to follow up, I think this is -- good  
22 afternoon, by the way, Doctor.

23                THE WITNESS: Good afternoon.

24                JUDGE STRICKLER: This goes to the  
25 question you were asking. It is in paragraph 4 of

1 your written direct testimony.

2 THE WITNESS: Sure.

3 JUDGE STRICKLER: On page 2. Are you  
4 there? Let me know when you are.

5 THE WITNESS: Sure. Okay.

6 JUDGE STRICKLER: You say: "A per-play  
7 rate structure for interactive streaming is  
8 appropriate because it is simple and transparent.  
9 It also is intuitive for publishers and songwriters,  
10 and avoids the confusion inherent in the current  
11 royalty rates and the alternative rates proposed by  
12 the participants in this proceeding."

13 THE WITNESS: Um-hum.

14 JUDGE STRICKLER: I take it from your  
15 testimony before, from reading your report, that you  
16 are not confused as to what the existing rates are  
17 and how to understand them and what the proposal is  
18 from the Services other than Apple. Is that a fair  
19 statement?

20 THE WITNESS: I am not confused about  
21 what the proposals are, yes.

22 JUDGE STRICKLER: Right, I didn't think  
23 you were.

24 THE WITNESS: Yeah.

25 JUDGE STRICKLER: So when you talk about

1 avoiding the confusion, whose confusion are you  
2 talking about?

3 THE WITNESS: I am referring to the  
4 confusion, you know, I've read a lot of reports that  
5 have shown the confusion of the people who receive  
6 the royalties, right, so the songwriters, where they  
7 are uncertain about, you know, they see that they  
8 have a large demand for their songs that they have  
9 written on these services, but then the royalty  
10 payments that they receive seem confusing to them.  
11 Right?

12 JUDGE STRICKLER: So you are talking  
13 about songwriters who are confused?

14 THE WITNESS: Yes.

15 JUDGE STRICKLER: People whose expertise,  
16 as far as you understand it, is in song writing.

17 THE WITNESS: Right. Exactly.

18 JUDGE STRICKLER: So you are recommending  
19 to us that we should set a rate that is sufficient  
20 to avoid the confusion engendered in people who  
21 write songs?

22 THE WITNESS: Yes.

23 JUDGE STRICKLER: Okay. Thank you.

24 BY MS. SCHMITT:

25 Q. So, Professor, could you describe what is

1 shown on this slide in front of you which was taken  
2 from your direct report?

3 A. Sure. So this, as the title says, is  
4 Recorded Music Revenues By Distribution. What this  
5 chart demonstrates is that since 1995 we have seen a  
6 decline, well, an increase briefly and then a  
7 decline in physical distribution over time, until  
8 about -- until 2015 where this chart ends.

9 Since 2003 we have seen an increase in  
10 digital downloads, until about 2012 or 2013 where we  
11 see a decline represented on this chart.

12 But during that time, and particularly  
13 since 2011, we see an increase in interactive  
14 streaming. All right. So while digital downloads  
15 was sort of starting to decrease, interactive  
16 streaming was starting to increase, which could  
17 support this notion that interactive streaming and  
18 downloads are substituting for one another, or  
19 streaming is substituting for digital downloads.

20 Q. And do you have an opinion as to whether  
21 streaming, interactive streaming is a substitute for  
22 downloads?

23 A. Yes, I believe -- I believe it is.

24 Q. Is the idea that interactive streaming is  
25 a substitute for downloads supported by academic

1 research?

2 A. Yes, it is.

3 Q. And does the music industry generally  
4 view interactive streaming as a substitute for  
5 digital downloads?

6 A. Yes.

7 Q. And do you think interactive streams and  
8 downloads are similar?

9 A. Yes, absolutely. They are similar in a  
10 few different ways. The main one is that we can  
11 listen to, with both digital downloads and  
12 interactive streaming, we can listen to whatever  
13 song we like to at whatever time we would like to.

14 Q. And with downloads do you -- does a user  
15 typically see video content?

16 A. No, they do not.

17 Q. And what about with interactive  
18 streaming?

19 A. With interactive streaming neither,  
20 right. So they are similar in that way as well.

21 Q. And in your opinion what is the state of  
22 digital downloads -- excuse me, let me restate that.

23 In your opinion what is the state of the  
24 digital download market today?

25 A. I think we can see from this chart that



1 it is still robust. The digital download market is  
2 still robust. There is \$3 billion in sales. And we  
3 still have people who are very interested in owning  
4 permanent downloads of what they -- of the music  
5 library.

6 Q. Has the number of services that offer  
7 interactive streaming in the U.S. changed since  
8 2008?

9 A. Yes.

10 Q. And did you prepare a slide that  
11 illustrates that?

12 A. Yes, I did.

13 Q. So turning to Apple Demonstrative 13,  
14 could you describe what is on the screen, please?

15 A. Sure. So this is exactly what you asked  
16 me about. So since -- this shows that since 2011  
17 several of the prominent digital streaming, on-line  
18 music streaming sites have come into the market,  
19 have entered into the market.

20 So Spotify, Google Music, Xbox, Napster,  
21 TIDAL and Groove, Apple Music, they've all entered  
22 the market during this time period.

23 Q. And if I could direct your attention to  
24 the next slide on the screen, which incorporates a  
25 demonstrative slide that the Copyright Owners used

1 earlier in this proceeding, can you describe what  
2 this slide indicates to you?

3 A. Sure. So this also represents some of  
4 the entrants into the digital streaming market,  
5 on-line streaming market. At the same time it also  
6 shows the increase in interactive streaming  
7 particularly since 2011. We see that interactive  
8 streaming has become quite a large -- is quite --  
9 there is a large number of total streams that are  
10 currently happening and this has grown over time.

11 And in particular, when we look at this  
12 change from 2008 to 2011 to now, we see that in 2008  
13 there is barely any streams, barely any streams  
14 existed, whereas today it looks like a pretty strong  
15 market.

16 Q. I would like to discuss your views on how  
17 the interactive streaming services have fared since  
18 entering the market.

19 Has the number of paid subscribers to  
20 interactive streaming services increased in the U.S.  
21 since 2008?

22 A. Yes.

23 Q. Okay. And I would like to show you the  
24 next slide that you prepared, Apple Demonstrative  
25 15, which reflects a graph taken from your direct

1 written testimony.

2 Can you describe what this graph  
3 illustrates?

4 A. Sure. This graph shows the paid  
5 subscriptions to streaming services. It shows that  
6 from 2011 to 2015, which are actual numbers from the  
7 RIAA, that paid subscriptions have an increasing  
8 trend over time.

9 The second line, which is the red line,  
10 shows -- is a forecast from Cowen and Company which  
11 shows that they expect that this trend to continue  
12 into the future, and they project this out to 2021.

13 Q. In your opinion is it necessary to  
14 maintain a revenue-based or subscriber-based rate  
15 structure for the interactive streaming services  
16 industry to continue to grow?

17 A. No.

18 Q. Do you think it would be difficult for  
19 interactive streaming services to now switch to a  
20 per-play rate structure?

21 A. No, not at all.

22 Q. Why is that?

23 A. Yeah, they -- well, first of all, this  
24 has sort of been the approach that they have been  
25 using over time, with other types of consumption,

1 physical distribution and digital downloads. It has  
2 been a per-play rate.

3 And also this is data that they already  
4 collect, the streaming services already collect.

5 JUDGE STRICKLER: You said they use a  
6 per-play rate, excuse me, a per-play rate in other  
7 areas.

8 THE WITNESS: Per unit rate. Excuse me.

9 JUDGE STRICKLER: Per unit. That wasn't  
10 my question. In other areas, you said, plural. And  
11 then you made reference to downloads.

12 THE WITNESS: And physical distribution.

13 JUDGE STRICKLER: And physical  
14 distribution. Were those the only areas you were  
15 intending to mean when you said they have done it in  
16 other areas?

17 THE WITNESS: Yes. Yes, I believe so,  
18 physical distribution and digital downloads.

19 JUDGE FEDER: So by they -- I'm sorry.

20 JUDGE STRICKLER: So those weren't by way  
21 of example, that was by way of exhausting the  
22 category of other areas where they do it on a --  
23 where they pay on a per-play rate basis?

24 THE WITNESS: I can't -- off the top of  
25 my head I can't think of other areas where they do

1 have a per-unit basis.

2 JUDGE STRICKLER: Per unit, right.

3 THE WITNESS: Yeah. So per unit is what  
4 I meant, so physical distribution and digital  
5 download, yes.

6 JUDGE STRICKLER: Thank you.

7 JUDGE FEDER: So by they, you are not  
8 referring specifically to interactive streaming  
9 services?

10 THE WITNESS: No.

11 JUDGE FEDER: You are referring to  
12 distributors in the music industry?

13 THE WITNESS: As a whole, yeah. Sorry.  
14 My apologies. So for interactive streaming  
15 services, they are -- they would not be -- so I  
16 think the industry as a whole could adapt to  
17 per-play rate because a per-unit rate structure is  
18 similar to that.

19 In terms of interactive streaming  
20 services, which I think is what your question was,  
21 the per-play rate is something that is easy to adapt  
22 to because they collect this data already.

23 They know the number of streams that  
24 happen on the site. Right now they put it into a  
25 more difficult formula but it could be put into a

1 simpler formula.

2 JUDGE STRICKLER: Just so it is clear  
3 then, when you say it is easy for the streaming  
4 services to adapt to it, it would be easy to measure  
5 it?

6 THE WITNESS: Right.

7 JUDGE STRICKLER: You are not saying in  
8 this testimony that you just gave that it would be  
9 easy for them to thrive with it? You may be saying  
10 that later on, but your point now is that it is easy  
11 technically to calculate the rate?

12 THE WITNESS: Exactly. It is easy to  
13 calculate the -- well, to implement a new rate  
14 structure that's a per-play rate structure.

15 JUDGE STRICKLER: Thank you.

16 THE WITNESS: Yes, yes.

17 BY MS. SCHMITT:

18 Q. And just to be clear because I think  
19 there was some confusion about this, the "they" in  
20 the question. Let me phrase it another way.

21 Do you think a per-play rate is a  
22 traditional approach or a non-traditional approach  
23 in the music industry generally?

24 A. Right. So in the music industry as a  
25 whole it is a traditional approach as I -- as I

1 mentioned before, that it is something that we're  
2 used to because we're used to consuming things and  
3 paying for things by the unit.

4 JUDGE STRICKLER: Is a percentage of  
5 revenue rate also a traditional way of paying for  
6 music in the music industry?

7 THE WITNESS: Not -- not to the best of  
8 my knowledge, no. I mean, with CD -- with physical  
9 distribution and digital downloads, it is really a  
10 per unit.

11 JUDGE STRICKLER: How about with regard  
12 to sound recordings for interactive streaming?

13 THE WITNESS: Right, so I would consider  
14 interactive streaming not as traditional as physical  
15 distribution and digital downloads.

16 JUDGE STRICKLER: So are you saying that  
17 the percentage of revenue is prevalent with regard  
18 to the rates that are paid for sound recording  
19 rights by interactive streaming, that that's just  
20 not something that you would pigeonhole within the  
21 traditional category?

22 THE WITNESS: Right. So it is what they  
23 do with non-interactive streaming, yes, it is not  
24 something that, you know, history.

25 Digital downloads, cassettes, yeah, and

1 physical distribution have been, historically have  
2 been around for much longer than non-interactive  
3 streaming and interactive streaming.

4 JUDGE STRICKLER: Thank you.

5 BY MS. SCHMITT:

6 Q. Now, turning your attention to the  
7 Copyright Owners, namely, the publishers and the  
8 songwriters, has the way they have earned revenue  
9 from on-line music distribution changed since 2008?

10 A. Sorry, could you say that one more time?

11 Q. Sure. Has the way they have -- "they"  
12 meaning the songwriters and publishers -- has the  
13 way they have earned revenue from on-line music  
14 distribution changed since 2008?

15 A. Yes, it has.

16 Q. And are they now looking to interactive  
17 streaming more for compensation than they did in  
18 2008?

19 A. Yes, they are.

20 Q. And as part of your work, have you done  
21 research regarding songwriters' opinions about the  
22 current rate structure for interactive streaming?

23 A. Yes. So I think I mentioned this a bit  
24 earlier, but, yeah, a lot of -- many of the articles  
25 that I have read, and sort of being involved in the



1 music industry, has shown their dissatisfaction with  
2 the uncertainty associated with the rates, yes.

3 Q. And have you prepared a slide sort of  
4 illustrating that, those points?

5 A. Yes, I have.

6 Q. So turning to the next slide on this  
7 screen, Apple Demonstrative 16, can you describe  
8 what this depicts?

9 A. Sure. These are, I think, two of the  
10 sort of prevalent complaints of the songwriters that  
11 I have seen. So lack of transparency and too much  
12 variability.

13 So in terms of lack of transparency, it  
14 is -- it is sort of, as I said, they know that their  
15 song had X number of streams but it is not quite  
16 clear how that was translated into the royalty  
17 payment that they get in the mail. Right? So this  
18 is something that demonstrates this lack of  
19 transparency.

20 In terms of variability, there have also  
21 been reports that sort of demonstrate that, you  
22 know, you can -- a songwriter can have their song  
23 played X number of times -- or the same number of  
24 times across two different months and get different  
25 royalty payments. Right? So -- or across different

1 services they get different royalty payments.

2           So that's -- that variability and  
3 transparency are sort of causing them confusion that  
4 I mentioned earlier.

5           Q.   Next let's turn to Apple's particular  
6 per-play rate, which is an all-in rate of .00091 for  
7 non-fraudulent interactive streams of 30 seconds or  
8 longer.

9           A.   Sure.

10          Q.   Turning to the next slide, which is -- or  
11 back to a slide that we saw earlier with Mr. Dorn,  
12 can you describe what is shown here, please?

13          A.   Sure. So this takes the digital download  
14 rate of .091 dollars per download, multiplies it by  
15 the conversion ratio, from downloads to streams,  
16 that Apple uses, which results in a .0091 per-stream  
17 rate.

18          Q.   And do you have an understanding of why  
19 it was divided by 100?

20          A.   Yes. So there were a variety of industry  
21 benchmarks that were looked at and academic  
22 benchmarks that were looked at that shows that the  
23 substitution between downloads and streams could be  
24 between 1 and 100 and 1 and 150, yes.

25               JUDGE STRICKLER: If it was 1 and 100 and

1 1 and 150, why did you -- do you opine that the  
2 1-to-100 is the appropriate rate?

3 THE WITNESS: It is the rate that sort of  
4 is on the more conservative end. And so it affords  
5 songwriters a better return, a better royalty  
6 payment. So, so it is a conservative side of that.

7 JUDGE STRICKLER: Better for them and  
8 worse for the Services. The Services would do  
9 better at the 100 --

10 THE WITNESS: They would pay a lower  
11 royalty rate at a 150, yes.

12 JUDGE STRICKLER: So why would you as an  
13 expert say it is better to be favoring the Copyright  
14 Owners as opposed to the Services?

15 THE WITNESS: So it is just -- it is a  
16 rate that has actually been -- so .091 is close to,  
17 from what I know, the rate that is currently being  
18 paid. So it is something that the Services are used  
19 to paying.

20 It is also -- so the ratios, the  
21 benchmarks that were looked at range between 100 and  
22 150. And so it is something that exists in the  
23 industry. And it is the Copyright Owners, I mean,  
24 they do deserve a fair return and that's one of the  
25 objectives of the copyright part.

1 JUDGE STRICKLER: The 100 came out of a  
2 British conversion. Did you do any investigation or  
3 analysis to see whether the conversion ratio in  
4 Britain was the same or should be the same as the  
5 conversion ratio in the United States?

6 THE WITNESS: I didn't look specifically  
7 at -- I didn't do any analysis comparing the two  
8 markets, but the U.K. benchmark, that benchmark, the  
9 Official Charts Company benchmark, that's a  
10 well-respected organization, very similar to the  
11 Billboard charts, so yeah.

12 JUDGE STRICKLER: The witness just before  
13 you, I believe, Mr. Dorn, testified that Official  
14 Charts just changed their ratio to 150 as well.

15 THE WITNESS: Right.

16 JUDGE STRICKLER: Does that change your  
17 opinion at all?

18 THE WITNESS: No, it doesn't.

19 JUDGE STRICKLER: Why not?

20 THE WITNESS: Again, the ratios are, you  
21 know, there is a range of ratios from 100 to 150. I  
22 think we don't have a lot of -- or I didn't have a  
23 lot of visibility into the complete formula that  
24 goes into calculating these things.

25 And 100, again, is on the conservative

1 side of this, which affords the Copyright Owners a  
2 fair return. Right?

3 So I think part of this was ensuring that  
4 both the copyrighters get a fair -- the Copyright  
5 Owners get a fair return as well as the streaming  
6 services aren't paying, you know, it is fair to the  
7 streaming services as well. So this was what feels  
8 sort of like a good balance between the two.

9 JUDGE STRICKLER: Thank you.

10 MS. SCHMITT: And, Your Honor, just to  
11 clarify, we're going to talk about the benchmarks in  
12 detail, and there are additional ones, other than  
13 the two that Mr. Dorn testified about that the  
14 witness will talk about.

15 JUDGE STRICKLER: Thank you.

16 BY MS. SCHMITT:

17 Q. Now, I would like to focus on the first  
18 box of the slide, which indicates that Apple's rate  
19 is derived on the 9.1 cent rate for digital  
20 download.

21 Do you believe it is appropriate to use a  
22 rate for digital downloads to derive a rate for a  
23 digital interactive streaming?

24 A. Yes, I do.

25 Q. And why do you think that?

1           A.    As I said before, well, first of all, the  
2 digital download rate is something that was agreed  
3 upon. It was subject to the four 401 -- or four  
4 801(b) factors. And it has been not contested by  
5 any of the parties involved in this. So that's a  
6 good starting place, a fair starting place for the  
7 calculation.

8                   In addition, digital downloads and  
9 interactive streams are similar means of  
10 consumption, as we have talked about before. They  
11 both allow you to, or allow a user to consume or  
12 listen to whatever song they want to at whatever  
13 time they want to.

14           Q.    And I think, as you said before, it would  
15 be your opinion that they are substitutes for each  
16 other?

17           A.    They are substitutes, yes, I do believe  
18 that.

19           Q.    Now, we haven't yet heard from Jeffrey  
20 Eisenach, who is one of the Copyright Owners'  
21 experts.

22                   Are you aware that he made some  
23 statements in his rebuttal testimony criticizing  
24 you?

25           A.    Yes, I am.

1 Q. And you should have a copy of his written  
2 rebuttal testimony in the binder. And turning to  
3 paragraph 43, he states that "the 9.1 cent per track  
4 penny rate does not reflect market prices for the  
5 reasons discussed above relating to the 2008  
6 settlement, the 2012 settlement, and the Section 115  
7 direct licenses. It is the result not mainly of  
8 forces but of regulatory fiat."

9 Do you have an opinion about that  
10 statement?

11 A. I don't think it particularly makes sense  
12 in this context. The idea here is to set a rate  
13 that is consistent with the four 801(b) factors, and  
14 being a market rate is not, is not one of those  
15 factors.

16 Q. Further, in paragraph 46, Dr. Eisenach  
17 states that the 24 cent rate for ringtones is "more  
18 closely tied to market forces because it was based  
19 on agreements negotiated in the free market before  
20 it was clear whether or not ringtones were eligible  
21 for the Section 115 license."

22 Do you have an opinion about that  
23 statement?

24 A. Sure. Again, the market rate is not  
25 something that is being considered in the four

1 801(b) factors, and ringtones as a benchmark, sort  
2 of, for this seems a bit bizarre as well.

3 Q. So just to be clear --

4 JUDGE STRICKLER: I'm sorry, did you say  
5 it seems bizarre?

6 THE WITNESS: Bizarre, yeah.

7 JUDGE STRICKLER: Why bizarre?

8 THE WITNESS: Because, I mean, comparing,  
9 as I said, comparing digital downloads to  
10 interactive streaming seems -- it is the same sort  
11 of consumption experience. I don't listen to my  
12 ringtone to consume music. I'm not sure many people  
13 do.

14 So this consumption experience is very  
15 different between ringtones and interactive  
16 streaming.

17 BY MS. SCHMITT:

18 Q. So to be clear, do you think it would  
19 have been appropriate to use the 24 cent rate for  
20 ringtones to derive a rate for interactive  
21 streaming?

22 A. No, I do not.

23 Q. Now, I would like to focus on the second  
24 box in this equation, which indicates that Apple's  
25 rate is derived by dividing the 9.1 cent rate for



1 digital downloads by 100.

2 Again, do you think it is appropriate to  
3 divide by 100 in this situation?

4 A. I do.

5 Q. Now, you mentioned earlier industry and  
6 academic benchmarks, and we will discuss those. But  
7 first, in general -- and, again, what was the range  
8 that you found with these benchmarks?

9 A. So the range was between 1-to-100 and  
10 1-to-150.

11 Q. Okay.

12 JUDGE STRICKLER: When you say that is  
13 the range, that is the range -- aside from what  
14 counsel may have asked you about one particular  
15 academic study that we have heard about already, the  
16 range consists of two end points, 100 and 150?

17 THE WITNESS: Yeah, between, yeah,  
18 between 100, 150, and then, as you said, the  
19 academic study, which is at 137.

20 JUDGE STRICKLER: But those, the range,  
21 you have the academic study which we will get to,  
22 the 100 and the 150, those are the only three data  
23 points, right?

24 THE WITNESS: Right. But there are  
25 multiple -- there are multiple industry benchmarks

1 that have a 1-to-100 and have moved to 1-to-150. So  
2 it is not just two.

3 JUDGE STRICKLER: You say there is more  
4 than one 1-to-100 ratio?

5 THE WITNESS: Yes. At one point another  
6 chart used 1-to-100 as well.

7 JUDGE STRICKLER: I will let counsel ask  
8 you about that.

9 THE WITNESS: Yeah, sure.

10 MS. SCHMITT: Thank you.

11 BY MS. SCHMITT:

12 Q. So before we get to the specific  
13 examples, I would just like to ask you about the  
14 purpose for these industry benchmarks.

15 A. Sure.

16 Q. Why were they created?

17 A. Right. So the industry benchmarks, to be  
18 clear, to convert streams to downloads were created  
19 in order to be consistent with the measurement that  
20 was occurring previously in the industry. Right?

21 So there was always an easy way, as we  
22 discussed earlier, to sort of measure sales  
23 consumption. Right? So you can measure X number of  
24 CDs were sold or X number of digital downloads were  
25 downloaded. And so you could really measure the

1 sales and, therefore, have that as a proxy for  
2 popularity.

3           When streaming came about, this is  
4 another sort of measure of trying to make it fit  
5 with these charts. This new way of consuming was  
6 something that the industry really had to struggle  
7 with and figure out how do we say people are  
8 consuming from CDs and digital downloads, how do we  
9 make interactive streaming consumption fit in with  
10 that, and so that's where this conversion ratio  
11 comes in.

12           Q.   And they were using them for their sales  
13 charts?

14           A.   For their sales charts, yeah. So as we  
15 will discuss, Billboard and the U.K. use it for  
16 their sales charts. They use it for certifying  
17 Platinum and Gold Albums, things like that. So all  
18 to measure sort of fails as a measure of popularity.

19           JUDGE FEDER: Excuse me. For purposes of  
20 Gold and Platinum Albums, "they" being --

21           THE WITNESS: Oh, the -- the RIAA who  
22 does the certification, I think.

23           JUDGE FEDER: Thank you.

24           THE WITNESS: Sure.

25 BY MS. SCHMITT:

1 Q. In your opinion are those industry  
2 benchmarks relevant to these proceedings?

3 A. They are relevant to these proceedings,  
4 yes.

5 Q. In your opinion they are relevant?

6 A. Yes.

7 Q. And why do you think that?

8 A. They are independent -- I mean, they were  
9 independently-determined benchmarks that feed into  
10 sort of what were the same thing that we're trying  
11 to do today. Right?

12 So we're trying to come up with this way  
13 to convert sort of a rate that we know, that we  
14 trust, that makes sense, into a per-stream rate for  
15 digital downloads. So they were struggling with the  
16 same questions that we were.

17 And so using those  
18 independently-determined benchmarks sort of makes  
19 sense.

20 Q. Okay. So let's first discuss these --  
21 let's get into the industry benchmarks.

22 A. Sure.

23 Q. I will show you Apple Demonstrative 17.  
24 Can you describe what is shown on this screen,  
25 please?

1           A.    Sure.  So this is representing sort of  
2 the benchmark that Billboard uses for their charts.  
3 So one download is equivalent to 150 streams.  And  
4 this, the Billboard charts are based on Nielsen  
5 Soundscan data.

6           Q.    And what is Billboard?

7           A.    Billboard is a media entertainment  
8 company, it's very well-known in the industry, and  
9 it does the charting for the music industry.

10          Q.    And are you aware of the Billboard 200  
11 chart?

12          A.    I am, yes.

13          Q.    And what is that?

14          A.    That's a weekly chart of the top 200  
15 albums, and as measured by sales.

16          Q.    So it is a sales chart?

17          A.    It is a sales chart, yes.

18          Q.    And what types of sales does Billboard  
19 consider in creating its Billboard 200 chart?

20          A.    So it considers, in terms of sales, it  
21 considers physical distribution and digital  
22 downloads.  It has also recently added interactive  
23 streaming.

24          Q.    When did Billboard start considering  
25 streaming or interactive streaming as part of its

1 Billboard 200 chart?

2 A. 2014.

3 Q. I would like for you to look at a tab in  
4 your binder marked Apple Trial Exhibit 1441, which  
5 was introduced into evidence earlier. Tell me when  
6 you have it, Professor.

7 A. Sure. Yes, I have it.

8 Q. And you recognize that document, correct?

9 A. Yes, I do.

10 Q. Did you prepare a slide with some  
11 excerpted language from this?

12 A. I did, yes.

13 Q. So turning to --

14 JUDGE STRICKLER: It is in the white  
15 binder?

16 MS. SCHMITT: It should be in the first  
17 binder. I'm sorry, it should be Tab 1441.

18 JUDGE STRICKLER: Thank you.

19 BY MS. SCHMITT:

20 Q. So, Professor, could you describe what is  
21 shown on the screen here?

22 A. Sure. This is an article from Billboard  
23 which was part of my written direct testimony. It  
24 is dated November 19th, 2014. And it is -- the  
25 title is Billboard 200 Makeover, Album Chart to

1 Incorporate Streams and Track Sales.

2           And so that's exactly what it is talking  
3 about is the incorporation of the streams to the  
4 Billboard 200.

5           Q.   And could you describe the language  
6 excerpted on the screen, please?

7           A.   Sure.   So as you can see, the updated  
8 Billboard 200 will utilize accepted industry  
9 benchmarks for digital and streaming data, equating  
10 10 digital track sales from an album to one  
11 equivalent album sale, and 1500 song streams from an  
12 album to one equivalent album sale.

13                So, in other words, they are equating one  
14 single sale, one digital download, to 150 streams.  
15 Then it says: "Adjustments for the Billboard 200  
16 took into account feedback from key executives in  
17 the music industry." So it tells us a little bit  
18 about how they came up with this.

19           Q.   Do you know who provides the data to  
20 Billboard for its charts?

21           A.   Nielsen Soundscan.

22           Q.   And what is Nielsen Soundscan?

23           A.   Nielsen Soundscan is exactly -- it  
24 collects data on sales and streams and it is used  
25 widely in the industry.

1 Q. And do you find or do you consider their  
2 data reliable?

3 A. Yes, absolutely. I use it in my own  
4 research, actually.

5 Q. And I would like to show you the next  
6 slide you prepared. Can you describe what is shown  
7 on Apple Demonstrative 19, please.

8 A. Sure. So this is taking the per-download  
9 rate of 0.091, multiplying it by the conversion  
10 ratio that Billboard uses of 1-to-150 to arrive at a  
11 per-stream rate of .00061.

12 Q. And other than Billboard, are you aware  
13 of any other industry players that use a metric of 1  
14 download to 150 streams?

15 A. Yes.

16 JUDGE STRICKLER: Before we get into  
17 that, let's stick with Billboard for a second.  
18 Paragraph 85 of your written direct testimony, on  
19 page 45. Are you there?

20 THE WITNESS: Yes.

21 JUDGE STRICKLER: In the last sentence  
22 that starts on page 45 and continues on to page 46  
23 you wrote: "In 2013, however, Billboard used the  
24 equivalent of one track and 200 streams" because --  
25 and it gives reasons why, but let me stop there.



1           We're setting rates for the 2018 to 2022  
2 period. And you just testified that you found -- we  
3 can go back to the slide immediately before this,  
4 the one that was just up there, there we go -- that  
5 the Billboard 200 utilizes accepted industry  
6 benchmarks.

7           So would you agree that Billboard now  
8 uses a 1-to-200 and that that is the accepted  
9 industry benchmark if you are using the Billboard  
10 benchmark?

11           THE WITNESS: So Billboard actually  
12 started doing this in 2014. And the benchmark they  
13 have always used is 1-to-150. This was a  
14 calculation that was done in an article that  
15 indicated that using a particular methodology it  
16 would have been 1-to-200 streams.

17           JUDGE STRICKLER: So which is their  
18 current conversion?

19           THE WITNESS: So the current conversion  
20 is 1-to-150.

21           JUDGE STRICKLER: The current conversion  
22 is 1-to-150.

23 BY MS. SCHMITT:

24           Q. To clarify -- and, Your Honor, if I  
25 may -- Professor, did Billboard ever use a metric

1 for its chart purposes of 1-to-200?

2 A. No, they didn't. They have always used  
3 1-to-150.

4 Q. And this article or this statement you  
5 made was based on an article from 2014. Is that  
6 correct?

7 A. Yes.

8 Q. Okay. But to be clear, Billboard never  
9 actually used, have used a metric of 1-to-200?

10 A. No, they have not.

11 Q. In 2014 or today?

12 A. No. Exactly.

13 Q. And when I say "use," I mean for purposes  
14 of its charts.

15 A. Of its charts, right.

16 Q. So I would like to draw your attention to  
17 the next demonstrative that you prepared, which we  
18 marked Apple Demonstrative 20.

19 Can you describe what's on the screen  
20 here, please?

21 A. Sure. This shows the conversion ratio  
22 that the RIAA uses of 1-to-150. And they use this  
23 conversion ratio when they are calculating their  
24 Gold and Platinum Record certifications.

25 Q. And on the next slide, Apple

1 Demonstrative 21, can you describe what this  
2 illustrates?

3 A. Sure. This illustrates the 0.091 per  
4 download rate applying the conversion ratio of  
5 1-to-150 results in a .00061 per stream.

6 Q. And if you look behind the Apple chart,  
7 the tab in your binder marked Apple Trial Exhibit  
8 1469, and let me know when you have it.

9 A. I have it.

10 Q. Do you recognize that document?

11 A. I do. It was part of my written direct  
12 testimony. It is an article dated May 10th, 2013  
13 and it describes how -- RIAA adding streaming to the  
14 Digital Gold and Platinum Certification.

15 MS. SCHMITT: Your Honors, at this point  
16 I would like to offer Apple Exhibit 1469 into  
17 evidence.

18 MR. SCIBILIA: No objection.

19 JUDGE BARNETT: 1469 is admitted.

20 (Apple Exhibit Number 1469 was marked and  
21 received into evidence.)

22 BY MS. SCHMITT:

23 Q. Professor, did you prepare a slide with  
24 some -- highlighting some language from this  
25 article?

1 A. I did, yes.

2 Q. So turning to Apple Demonstrative 22,  
3 could you please explain?

4 A. Sure. So this is some language from this  
5 article and the new formulation, which apparently  
6 took a year to work out, a 100 streams of a song  
7 will be roughly equal to one download.

8 Q. I'm sorry, just to be clear, when was  
9 this statement made by the RIAA?

10 A. This article was from 2013.

11 Q. And is that when the RIAA first started  
12 using streams in its single charts or its single  
13 awards?

14 A. Yes. Exactly.

15 Q. But since then they have changed to  
16 1-to-150; is that right?

17 A. Yes, that's correct.

18 JUDGE STRICKLER: When did they change to  
19 1-to-150?

20 THE WITNESS: I believe -- I actually  
21 don't remember the exact time. I'm sorry.

22 JUDGE STRICKLER: That's okay. Thank  
23 you.

24 BY MS. SCHMITT:

25 Q. Turning away from the RIAA, I would like

1 to show you another slide that you prepared, Apple  
2 Demonstrative 23. Can you describe what this  
3 illustrates?

4 A. Sure. This is the U.K. Official Charts  
5 Company. This is a benchmark that they used to use  
6 of 1 download to 100 streams.

7 Q. And, again, just to be clear, what is the  
8 Official Charts Company?

9 A. Sorry, the Official Charts Company is  
10 similar to Billboard but it is in the U.K. It is  
11 one of the primary places that is looked to to  
12 understand music popularity in the U.K.

13 Q. And if you look in your binder again at  
14 Apple -- at the tab marked Apple Trial Exhibit 1489,  
15 and please let me know when you find it.

16 A. I have it.

17 Q. Do you recognize this document?

18 A. Yes. It was part of my written direct  
19 testimony. It is dated June 23rd, 2014. And it is  
20 an article that describes the inclusion of streams  
21 into the charts in the U.K., Official Charts  
22 Company.

23 MS. SCHMITT: Your Honors, at this point  
24 I would like to offer Apple Exhibit 1489 into  
25 evidence.

1 MR. SCIBILIA: No objection.

2 JUDGE BARNETT: 1489 is admitted.

3 (Apple Exhibit Number 1489 was marked and  
4 received into evidence.)

5 JUDGE STRICKLER: I think you said, and  
6 this goes back to sort of the previous discussions  
7 we have had, that the 1-to-100 used to be the rate  
8 they have?

9 THE WITNESS: Yes.

10 JUDGE STRICKLER: They now have 1-to-150?

11 THE WITNESS: Yes, as of December 2016.  
12 Exactly.

13 JUDGE STRICKLER: But you, as you  
14 testified, you stick with the 1-to-100 conversion?

15 THE WITNESS: Yes.

16 JUDGE STRICKLER: Let me put this sort of  
17 in the form of a hypothetical. If a year ago they  
18 had gone to the 1-to-100 -- excuse me, to the  
19 1-to-150, would you have used the 1-to-150 instead?

20 THE WITNESS: Not necessarily. I mean, I  
21 see that there is a variety of different benchmarks  
22 and so this is something that guided sort of the  
23 rates but, no, I wouldn't have necessarily changed  
24 it.

25 JUDGE STRICKLER: And help me out

1 again -- it is getting a little later in the  
2 afternoon -- other than the Official Charts, is  
3 there another one in the record that is 1-to-100?

4 THE WITNESS: So RIAA was using 1-to-100  
5 as well.

6 JUDGE STRICKLER: Was?

7 THE WITNESS: Was using it, yes.

8 JUDGE STRICKLER: It is not using it any  
9 more?

10 THE WITNESS: No.

11 JUDGE STRICKLER: So your 1-to-100 is  
12 based on two industry factors that used to exist;  
13 both of them no longer exist?

14 THE WITNESS: Right. So the range is  
15 based on -- so over the last several years, this is  
16 something that has been discussed in the industry,  
17 and so it is a benchmark that has been used over  
18 time. So, yeah.

19 JUDGE STRICKLER: But you don't have a  
20 whole lot of benchmarks; you have three basically,  
21 if I am understanding it correctly, RIAA, Billboard,  
22 and the charts.

23 THE WITNESS: And the charts and then the  
24 academic study, which you know.

25 JUDGE STRICKLER: Right, which we haven't

1 gotten to yet. But with regard to the industry  
2 standards, two of them have changed to 1-to-150 but  
3 you are sticking with the 1-to-100?

4 THE WITNESS: Again, I think 1-to-100 is  
5 -- to go back to the objective, it results in a fair  
6 rate for both the Copyright Owners and the streaming  
7 services.

8 JUDGE STRICKLER: I thought the fairness  
9 came from the fact that the industry had a standard.  
10 If the industry standard has changed, what is your  
11 basis for still sticking with 1-to-100 as fair?

12 THE WITNESS: It allows the -- it still  
13 affords the Copyright Owners, I think, a fair  
14 return -- a good -- a return that they can be  
15 satisfied with. It is consistent with the royalty  
16 rates that are being paid now.

17 JUDGE STRICKLER: When you say "now,"  
18 under what standard?

19 THE WITNESS: Under the -- under the --  
20 so it's not -- so for the streaming services, it is  
21 -- so I guess from the streaming services'  
22 perspective, it will work, and from the Copyright  
23 Owners' perspective, it will give them a fair  
24 return.

25 JUDGE STRICKLER: But when you say it is



1 going to give them a fair return, and fairness was  
2 based on the conversion factors, we're in the world  
3 of tautology here, I think, because you are saying  
4 it is fair because it is fair. And I can't figure  
5 out at least from your testimony why the 1-to-100  
6 remains fair if it is based on an industry standard,  
7 and two of those data points, those limited number  
8 of data points, have now both moved to 1-to-150.

9               So where, in your expert opinion, where  
10 does the fairness come -- what is the support for  
11 the fairness conclusion?

12               THE WITNESS: So I think part of the  
13 fairness comes from -- I think part of the fairness  
14 comes from the simplicity that is associated with  
15 the calculation that's done. Right? So we know  
16 that the fairness -- the fairness comes from the  
17 digital download, part of the digital download rate.

18               So we take the digital download rate. We  
19 know that has been agreed upon by the Copyright  
20 Owners and the other parties here.

21               And then the 100 is sort of, as Mr. Dorn  
22 said earlier, is a clear, is a simple sort of way to  
23 do the calculation, and industry benchmarks have  
24 sort of used this in the past.

25               JUDGE STRICKLER: And it is clearer

1 because it is easier to divide by 100 in your head  
2 than 150?

3 THE WITNESS: It's straightforward. It's  
4 straightforward, yes.

5 JUDGE STRICKLER: And it is more  
6 straightforward because it is easier in your head to  
7 divide by 100 than by 150?

8 THE WITNESS: Sure.

9 JUDGE STRICKLER: Thank you.

10 BY MS. SCHMITT:

11 Q. And, Professor, in your -- in your -- is  
12 it your opinion that the range of 100 to 150 is an  
13 appropriate range?

14 A. It is an appropriate range, yes, I do.  
15 So, yes.

16 Q. So if something falls within that range,  
17 in your opinion, is that appropriate?

18 A. Yes. Absolutely.

19 Q. But in your opinion you believe -- or is  
20 it your opinion that one, the more conservative end  
21 of the range is fairer to the Copyright Owners?

22 A. Yes. I believe it gives the Copyright  
23 Owners a good return while not compromising the  
24 streaming services.

25 JUDGE STRICKLER: Can you just keep your

1 voice up at the end of the sentences? It's a little  
2 hard to hear.

3 THE WITNESS: Sorry.

4 JUDGE STRICKLER: That's okay. Thanks.  
5 It could be my ears and not your voice.

6 BY MS. SCHMITT:

7 Q. Sp, Professor, if I could turn you back  
8 to Apple Demonstrative 24, which is excerpted from  
9 the exhibit that was just admitted. Can you  
10 describe what language is used here?

11 A. Sure. Again, this is a language that  
12 described how they arrived at this -- or what their  
13 conversion ratio is. Streaming data will be counted  
14 towards the U.K.'s official singles chart from next  
15 month for the first time. 100 streams will be  
16 equivalent to one single purchase, whether download,  
17 CD or vinyl, for chart purposes.

18 The 100 ratio specifically has been  
19 agreed following extensive investigation of royalty  
20 rates paid and sense-checked in consultation with  
21 independent and major labels, digital retailers, and  
22 streaming services.

23 So, again, this talks about how, one,  
24 that the conversion ratio is one download to 100  
25 streams, and a little bit of insight into how they

1 arrived at that.

2 Q. And turning to the next slide, does this  
3 -- can you just briefly describe what is depicted  
4 here?

5 A. Sure. This applies the 1-to-100  
6 conversion ratio that the U.K. Official Charts  
7 Company used to the digital download rate to arrive  
8 at a 0.00091 per-stream royalty rate.

9 Q. You mentioned earlier that the U.K.  
10 charts have now switched to 150, correct?

11 A. Yes.

12 Q. Does that change your opinion on the  
13 reasonableness of Apple's proposal?

14 A. No.

15 Q. And are you aware of a company called  
16 BuzzAngle Music?

17 A. I am.

18 Q. What is it?

19 A. It is a company similar to Nielsen  
20 Soundscan that tracks the sales data in streaming.

21 Q. And do they use a metric of 1-to-150?

22 JUDGE STRICKLER: I think we have an  
23 objection.

24 MR. SCIBILIA: Yes. BuzzAngle Music is  
25 nowhere mentioned in Ms. Ramaprasad's report nor any

1 benchmark or ratio used by BuzzAngle. It's brand  
2 new testimony.

3 JUDGE BARNETT: Ms. Schmitt?

4 MS. SCHMITT: It's true. It's one we  
5 learned since that they also used us as a benchmark.

6 JUDGE BARNETT: Sustained.

7 BY MS. SCHMITT:

8 Q. Do you think that the industry benchmarks  
9 that we just discussed are reliable?

10 A. Yes, I do.

11 Q. Why is that?

12 JUDGE STRICKLER: The ones we have  
13 discussed, does that include the 1-to-200?

14 THE WITNESS: The 1-to-200 was never used  
15 as a -- in the industry.

16 JUDGE STRICKLER: Okay.

17 BY MS. SCHMITT:

18 Q. But the industry benchmarks that we have  
19 spoken about, ranging from 100 and now to 150, do  
20 you find those reliable?

21 A. I do.

22 Q. And why do you think that?

23 A. I mean, they are -- they are reliable  
24 sources. Billboard, RIAA, U.K. Official Charts  
25 Company, they are all well-known in the industry.

1 They are all relied upon by members of the industry  
2 to measure the success of music from, you know, they  
3 are relied upon by artists, music publishers, a  
4 variety of different people in the industry as a  
5 measure of success.

6 Q. And do you have any reason to believe  
7 that any of the entities, Billboard, RIAA, U.K.  
8 Official Charts, have a reason to skew the ratios in  
9 any way?

10 A. No, not at all. Those -- they -- no, not  
11 at all. They did this independently. This is  
12 something that they did for their own purposes that  
13 can be applied here.

14 JUDGE STRICKLER: Well, you don't, at  
15 least you haven't testified to how they went about  
16 doing this. So whether they had a method for their  
17 madness or whether it was objectively precise or  
18 whatever reason they did it, you are not privy to  
19 that?

20 THE WITNESS: I am not privy to that. So  
21 it is independent of these proceedings, from what I  
22 know, yeah.

23 JUDGE STRICKLER: Well, you don't know  
24 anything about that, because you don't know how it  
25 was done? It could have been done specifically for

1 this proceeding for all you know?

2 THE WITNESS: Okay.

3 JUDGE STRICKLER: Thank you.

4 BY MS. SCHMITT:

5 Q. Well, do you have any reason to believe  
6 that those entities are not qualified to formulate  
7 these types of benchmarks?

8 A. No.

9 Q. And do you have any reason to believe  
10 that these entities undertook this task arbitrarily  
11 in any way?

12 A. No.

13 Q. And as far as you are aware, were these  
14 benchmarks created for litigation purposes?

15 A. As far as I'm aware, no.

16 Q. And do you rely on these sources in your  
17 academic research?

18 A. I do, yes.

19 Q. And would you have any reason to question  
20 their validity if they appeared in any academic  
21 papers that you were reviewing?

22 A. No, not at all.

23 Q. Are these benchmarks accepted in the  
24 music industry?

25 A. Yes, from what I can see, yes, they are.

1 Q. And how are they -- how does the music  
2 industry accept or rely on them?

3 A. So artists, music publishers, a variety  
4 of different members of the industry refer to these  
5 benchmarks to -- or refer to these charts, sorry,  
6 not these benchmarks, to tout, to promote, to market  
7 their artists and market their songwriters.

8 Q. And do the Copyright Owners rely on them?

9 A. Yes. I think Mr. Dorn gave an example of  
10 Drake earlier. Drake was publicized by his music  
11 publisher when he went Platinum, Gold Or Platinum, I  
12 don't remember now, but yes. So obviously these  
13 certifications are valuable to music publishers.

14 Q. And, again, what are these -- what are  
15 these industry benchmarks trying to measure?

16 A. These industry benchmarks are trying to  
17 measure what the substitution is between downloads  
18 and streams.

19 Q. Is that in terms of sales?

20 A. In terms of sales, yes. What amount of  
21 streams is equivalent to one sale of a digital  
22 download.

23 Q. So turning from industry benchmarks,  
24 let's focus on the academic benchmark that you  
25 mentioned.



1           A.    Sure.

2           Q.    Can you identify the research that you  
3 had mentioned earlier?

4           A.    Sure.  There is a paper by Luis Aguiar  
5 and Joel Waldfogel that determines the substitution  
6 between digital downloads and streaming.

7                   MR. SCIBILIA:  Excuse me.  Just so my  
8 silence shall not be deemed acquiescence, we have  
9 seen this article before.  We have objected to it  
10 before.  And we continue to object to it.

11                   JUDGE BARNETT:  Thank you, Mr. Scibilia.

12 BY MS. SCHMITT:

13           Q.    I would like to show you Pandora Trial  
14 Exhibit 909, which should be in your binder.

15                   JUDGE STRICKLER:  I just want to make  
16 sure I understand the objection.  This is an  
17 objection that it shouldn't be introduced or relied  
18 upon for the truth of the matter asserted or that it  
19 is not the type of thing that an expert would rely  
20 upon in forming an opinion?

21                   MR. SCIBILIA:  My objection is that it is  
22 a study that involves data that we have never seen,  
23 we don't have access to, the witness doesn't have  
24 access to, we don't know the underlying methodology,  
25 other than what it states in the paper.

1 JUDGE STRICKLER: But my question was  
2 more technical. Are you objecting to it because it  
3 shouldn't be taken as something for the truth of the  
4 matter asserted or because it is not the type of  
5 thing upon which an expert can reasonably rely in  
6 forming an opinion, or both or neither of those  
7 objections?

8 MR. SCIBILIA: Both. And I also object  
9 on the grounds that it does not meet the standard of  
10 Section 351-10-C, or 10-E, I believe, for an  
11 academic study.

12 JUDGE BARNETT: Your objections are noted  
13 and overruled. Go ahead, Ms. Schmitt.

14 BY MS. SCHMITT:

15 Q. Do you recognize this document?

16 A. I do.

17 Q. Can you describe what it is?

18 A. Sure. It is a paper written by Louis  
19 Aguiar and Joel Waldfogel which examines this  
20 question of the substitution between digital  
21 downloads and streams.

22 Q. Directing your attention to the slide you  
23 prepared in Apple Demonstrative 26, can you describe  
24 what this depicts?

25 A. Sure. The results of this paper indicate

1 that 137 streams can substitute for one digital  
2 download.

3 Q. And who were the researchers that did  
4 this study?

5 A. Louis Aguiar and Joel Waldfogel.

6 Q. Do you know who Joel Waldfogel is?

7 A. I do.

8 Q. Who is he?

9 A. He is a professor at the University of  
10 Minnesota in economics and he is a well-respected  
11 academic.

12 Q. Do you have an opinion -- is that your  
13 opinion?

14 A. I believe he is a well-respected  
15 academic, yes. I have -- I have seen his work and  
16 his presentations.

17 Q. So you have read other papers he has  
18 written?

19 A. I have. He studies the digital music  
20 industry and digital goods in general. So it is  
21 relevant to me.

22 JUDGE STRICKLER: Do you as an expert  
23 rely upon the articles that are published by other  
24 academics whose previous work you believe is  
25 reliable?

1 THE WITNESS: Yes, I do.

2 JUDGE STRICKLER: When you do that, in  
3 your ordinary course as an expert, do you look -- do  
4 you research the underlying data and methodologies  
5 that are utilized by the expert?

6 THE WITNESS: Yes.

7 JUDGE STRICKLER: Do you try to replicate  
8 what they have done?

9 THE WITNESS: Often. Not always. But  
10 often that is part of the exercise, yes.

11 JUDGE STRICKLER: Do you find it  
12 necessary to be able to actually replicate what they  
13 have done in order to rely on it as an expert?

14 THE WITNESS: No.

15 JUDGE STRICKLER: Did you replicate what  
16 Waldfogel and Aguiar did in this particular  
17 instance?

18 THE WITNESS: No, I did not. But I know  
19 the context very well. You know the data. When you  
20 work in this area, you know that data very well.  
21 You know what they can and can't do with it.

22 JUDGE STRICKLER: Thank you.

23 THE WITNESS: Sure.

24 BY MS. SCHMITT:

25 Q. So, again, do you consider Professor

1 Waldfogel knowledgeable in this type of research --

2 A. Yes.

3 Q. -- or well qualified to conduct this type  
4 of research?

5 A. Absolutely, yes.

6 Q. And do you know whether he is an expert  
7 in this proceeding?

8 A. I believe he was named as an expert by  
9 the Copyright Owners but never submitted written  
10 testimony.

11 Q. So turning your attention to the next  
12 slide, can you describe what is illustrated here?

13 A. Sure. So these are excerpts from the  
14 paper. In particular 137 Spotify streams appear to  
15 reduce track sales by one unit. We find that  
16 Spotify use displaces permanent downloads. In  
17 particular, 137 Spotify streams appear to reduce  
18 track sales by 1 unit. Our best estimate indicates  
19 that an additional 137 streams displaces one track  
20 sale.

21 Q. What, if anything, does this paper  
22 suggest to you about the substitution between  
23 downloads and interactive streams?

24 A. The results of this paper indicate that  
25 there is a substitution and that the ratio is

1 1-to-137.

2 Q. Now, do you know if this research was  
3 presented anywhere?

4 A. Yes. I actually saw a presentation of an  
5 early version of this at the National Bureau of  
6 Economics Research, Conference on IT --

7 JUDGE STRICKLER: When you say you saw  
8 it, you were actually there at the presentation?

9 THE WITNESS: Yes, I was.

10 BY MS. SCHMITT:

11 Q. And do you know if it was presented  
12 anywhere else?

13 A. Yes. Well, now it is a paper or working  
14 paper in the JRC. It is a JRC technical report for  
15 the European Commission.

16 Q. And do you consider this research  
17 reliable?

18 A. I do.

19 Q. Okay. Turning to the next slide, Apple  
20 Demonstrative 28, can you describe what is  
21 referenced here or shown here?

22 A. Sure. Taking the 0.091 per-download  
23 rates and using the 1-to-137 conversion ratio that  
24 Aguiar and Waldfogel find results in a per-stream  
25 royalty rate of .00066.

1           Q.   Now, we haven't yet heard from Marc  
2 Rysman, another one of the Copyright Owners'  
3 experts.

4                   Are you aware that he made some  
5 statements criticizing you in his written rebuttal  
6 testimony?

7           A.   Yes.

8           Q.   I would like for you to address  
9 Dr. Rysman's criticisms of your reliance on this  
10 study.

11          A.   Sure.

12          Q.   So turn to Dr. Rysman's rebuttal.  
13 Starting in paragraph 97, he argues first that your  
14 reliance on this study is misplaced because the  
15 researchers only look at the top 50 songs on Spotify  
16 and this is not proper for an aggregate level  
17 analysis.

18                   Do you have an opinion on that statement  
19 from him?

20          A.   Sure. So the top 50 songs -- first of  
21 all, it is a larger sample than 50 songs since this  
22 varies across time.

23                   But, in addition to that, they show in  
24 the paper itself that the top 50 songs, sorry, sales  
25 of the top 50 songs are correlated with those of the

1 top 200 songs. Right? So they show that this  
2 result can generalize beyond the top 50 songs.

3 Q. And do you have an opinion -- in your  
4 opinion does the fact that the researchers relied  
5 only on Spotify data render this research  
6 unreliable?

7 A. No, not at all. As we know, Spotify is  
8 one of the more prominent players in this industry  
9 so it makes sense to sort of generalize from  
10 Spotify.

11 Q. And in paragraph 98, Dr. Rysman cites his  
12 data that indicates that a user of Spotify Free  
13 streams about 58 streams per week, and then compares  
14 it with the Aguiar and Waldfogel conversion rate of  
15 137 streams to one download.

16 And Dr. Rysman concludes that "137 is  
17 very far outside of anything observed in the data."  
18 Do you have an opinion about that statement?

19 A. Sure. It doesn't really make sense. He  
20 is trying to compare two very different things,  
21 streams, weekly streams, with a ratio that is  
22 calculated. So these are two completely different  
23 non-comparable things.

24 Q. In paragraph 99, Dr. Rysman quotes  
25 language at the end of the Waldfogel study, or



1 paper, which notes that the results are based on  
2 limited data that fall short of the ideal, and that  
3 additional work would be helpful to provide more  
4 confidence in their answer.

5 Do you have an opinion about these  
6 statements that appear at the end of the paper?

7 A. Sure. It is very standard boilerplate  
8 language that we write at the end of most papers.  
9 Not all papers are -- or all papers that we sort of  
10 write are ongoing. Right? There is always more  
11 work that we can suggest to be done in the future.  
12 And that's basically what that is saying.

13 Q. Does this language at the end of the  
14 paper change your opinion as to whether this study  
15 was reliable?

16 A. No, not at all.

17 Q. In paragraph 100, Dr. Rysman states that  
18 when the researchers expanded their data to include  
19 countries outside the U.S., they found a conversion  
20 rate of 43-to-1. Do you have an opinion about that  
21 statement?

22 A. Sure. So Waldfogel, Aguiar and Waldfogel  
23 themselves say that number is less reliable. So  
24 they have run many regressions. They have many  
25 results. This is one that was pulled out of it.

1 This was based on a very small amount of data across  
2 countries outside the U.S. where we don't know  
3 whether Spotify is a dominant player or not.

4 So it is not really the right number to  
5 refer to. And the authors themselves say at the end  
6 that, despite all of these other numbers that they  
7 have come up with, 1-to-137 is the one that is the  
8 most robust, the one that makes sense.

9 Q. Lastly, in paragraph 101 Dr. Rysman cites  
10 a paper by Dada, Knox and Rodenberg. Are you  
11 familiar with that paper?

12 A. Yes, I am.

13 Q. And Dr. Rysman says the paper "reveals  
14 the untethered nature of your inquiry by implying a  
15 substantially different conversion rate of  
16 approximately 2-to-1."

17 Do you have an opinion about that  
18 statement?

19 A. Sure. That's the -- the Dada paper,  
20 Dada, et al. paper is not even trying to come up  
21 with a conversion ratio. They are looking at  
22 something very different. They are looking at sort  
23 of overall consumption number of streams and number  
24 of play counts that have already purchased music.

25 So this is not a conversion ratio between

1 one sale of a digital download to a set of streams.

2 Q. And what do you mean they were looking at  
3 play counts?

4 A. They were looking at how many times  
5 somebody streamed on -- so they looked at, after the  
6 entry of Spotify, did that change how many times  
7 people streamed on Spotify versus how many times  
8 they played their already-owned music on iTunes.

9 JUDGE STRICKLER: Was that done by a  
10 survey, as far as you know?

11 THE WITNESS: I think it is observational  
12 data. I think they have actual data, actual  
13 observational data from the sites, yes.

14 JUDGE STRICKLER: From the?

15 THE WITNESS: From the sites. From the  
16 services.

17 JUDGE STRICKLER: Well, how do they --  
18 well, how do they get -- oh, how many times the  
19 downloads themselves were played?

20 THE WITNESS: Yes. I think it is  
21 available on the iTunes interface from what I know.

22 JUDGE STRICKLER: Thank you.

23 THE WITNESS: Sure.

24 BY MS. SCHMITT:

25 Q. And to be clear, nowhere in this paper by

1 Dada, Knox and Rodenberg did they say that two  
2 streams equals one download?

3 A. No, not at all.

4 Q. Did anything in Dr. Rysman's written  
5 rebuttal testimony change your opinion that the  
6 Waldfogel study was reliable?

7 A. No, not at all.

8 Q. And did anything he say change your  
9 opinion that the 1-to-137 benchmark they reported is  
10 appropriate to consider in this context?

11 A. Sorry, can you repeat that?

12 Q. Sure. I'm sorry. Did anything  
13 Dr. Rysman say change your opinion that the 1-to-137  
14 benchmark is appropriate to consider in this  
15 context?

16 A. No.

17 Q. Now, I would like to sum up all the  
18 industry and academic benchmarks that you have  
19 discussed.

20 A. Sure.

21 Q. Turning to Apple Demonstrative 29, can  
22 you please summarize what is shown here?

23 A. Sure. This summarizes all of the  
24 benchmarks that we just discussed that range from  
25 the conversion range -- the conversion range is

1 1-to-100 to 1-to-150 streams per track, which  
2 results, if you apply that formula, the royalty  
3 range of 0.00061 to 0.00091.

4 Q. And based on this, what is your opinion  
5 of Apple's proposal of .00091 per stream?

6 A. I think it makes sense. As I said, I  
7 believe that 1-to-100 is a conversion ratio that  
8 allows the copyright owners to get a return that  
9 makes sense for them, and predictable to them, yeah,  
10 and also is fair for the streaming services.

11 Q. And did anything you read in  
12 Dr. Eisenach's or Dr. Rysman's written rebuttal  
13 testimony change your opinion about Apple's proposed  
14 rate for interactive streaming?

15 A. No, not at all.

16 MS. SCHMITT: Thank you.

17 JUDGE BARNETT: A good place to break, I  
18 think.

19 MS. SCHMITT: I agree with you, Your  
20 Honor.

21 JUDGE BARNETT: We will be at recess then  
22 until 9:00 o'clock in the morning.

23 (Whereupon, at 5:03 p.m., the hearing  
24 recessed, to reconvene at 9:00 a.m. on March 23,  
25 2017.)

1	C O N T E N T S				
2	WITNESS	DIRECT	CROSS	REDIRECT	RECROSS
3	DAVID PAKMAN				
4		2292	2347	2450	
5	DAVID DORN				
6		2439	2543		
7			2563	2565	
8	JUI RAMAPRASAD				
9		2573			
10					
11	AFTERNOON SESSION: 2438				
12					
13	CONFIDENTIAL SESSIONS:				
14	2384-2386, 2529-2542, 2549-2560, 2565-2569				
15					
16	E X H I B I T S				
17	EXHIBIT NO:	MARKED/RECEIVED			
18	GOOGLE				
19	696		2301		
20	775		2436		
21	776		2444		
22	777		2444		
23	APPLE				
24	1431		2444		
25	1432R		2444		

1	EXHIBIT NO:	MARKED/RECEIVED
2	APPLE	
3	1433R	2444
4	1434R	2444
5	1435R	2444
6	1436R	2444
7	1437R	2436
8	1439	2444
9	1440	2444
10	1441	2444
11	1442	2444
12	1469	2618
13	1489	2621
14	1585R	2444
15	1586R	2444
16	1587R	2444
17	1588R	2444
18	1589R	2444
19	1590R	2444
20	1592	2444
21	1593	2444
22	1594	2444
23	1595	2444
24	1596	2444
25	1611R	2442

1	EXHIBIT NO:	MARKED/RECEIVED
2	APPLE	
3	1612R	2443
4	1613R	2436
5	1614R	2436
6	1615	2584
7	1616	2585
8	COPYRIGHT OWNERS	
9	2640	2364
10	2641	2365
11	2678	2424
12	2752	2366
13	2780	2360
14	EXHIBIT:	MARKED FOR ID ONLY
15	5013	2349
16	5014	2393
17		
18		
19		
20		
21		
22		
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25		



## 1 CERTIFICATE

2

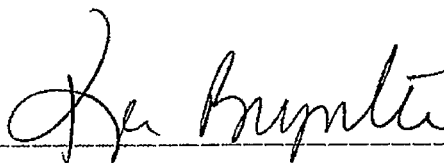
3 I certify that the foregoing is a true and  
4 accurate transcript, to the best of my skill and  
5 ability, from my stenographic notes of this  
6 proceeding.

7

8

9

3/22/17



10 Date

Signature of the Court Reporter

11

12

13

14

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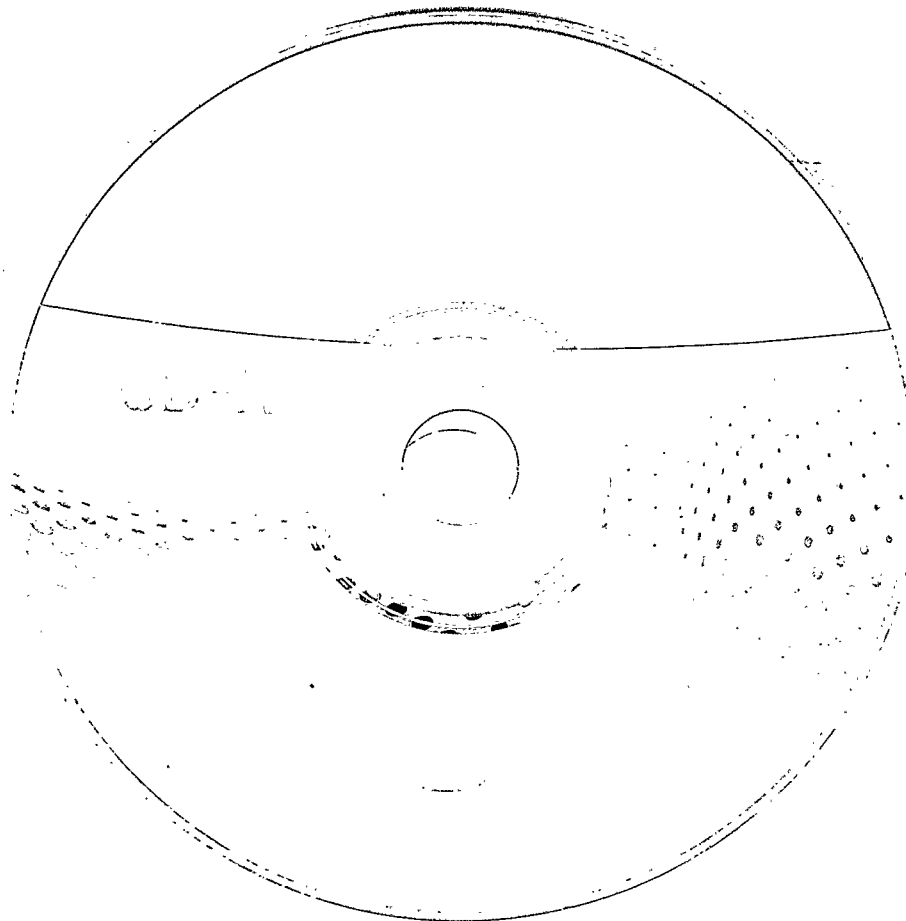
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